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ABSTRACT

The study compared two groups of fourth grade special needs children differing in mainstreaming experience--one group was currently receiving more segregated instruction than they had the prior year and the other group was receiving less. Variables investigated included measures of their attitude toward school, social acceptance by regular class children, attributes of their individual educational plans, opinions of their parents and teachers toward mainstreaming, and their regular teacher's perceptions of needs in the area of special education. Among findings were that changes in mainstreaming, type of instructional program, and student sex were, for the most part, unrelated to student perceptions of the quality of school life; that parents viewed segregated education more favorably as a way of educating children than did regular class teachers; and that the exceptional children in the sample, regardless of their change in mainstreaming, type of instructional program, or sex, were chosen less frequently by their regular class peers using a sociometric task than would be expected. (Appended materials include 1976-77 integration reports for communicatively and learning handicapped students, a copy of the Quality of School Life Questionnaire, and talley sheets for the Group Learning Survey.) (Author/SBH)

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The Effects of
Least Restrictive Alternatives
On Relevant Educational Role Groups

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Harry J. Larson

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ABSTRACT

THE LEAST RESTRICTIVE ENVIRONMENT RESEARCH PROJECT

The basic purpose of this study was to compare two groups of fourth grade children differing in mainstreaming experience. One group was currently receiving more segregated instruction than they had the prior year and the other group less.

The variables on which these groups were compared included measures of their attitude toward school, their social acceptance by regular class children, attributes of their individual educational plans, the opinions of their parents and teachers toward mainstreaming, and their regular teacher's perceptions of needs in the area of special education. In the case of two of these variables, social acceptance and special education needs, comparisons were made with similar data collected several years ago.

Generally speaking, few statistically significant differences were obtained. These included the following:

1. Changes in mainstreaming, type of instructional program and student sex were, for the most part, unrelated to student perceptions of the quality of school life. The one exception was that boys who were experiencing more mainstreaming this year than last reported a higher degree of commitment to school work.

2. The exceptional children in the sample, regardless of their change in mainstreaming, type of instructional program, or sex, were chosen less frequently by their regular class peers using a sociometric task than would be expected. These results agreed with the results from a similar study conducted in the same RLA prior to implementation of the Master Plan for Special Education.

3. Individual educational plans written for children who were presently experiencing more mainstreaming were better integrated or more consistent than were the plans written for children who were presently experiencing less mainstreaming.

4. Parents viewed segregated education (special classes for the exceptional) more favorably as a way of educating children than did regular class teachers. Teachers saw more problems associated with mainstreaming a child than did the parents of exceptional children. Otherwise, attitudes toward mainstreaming were unrelated to changes in amount of mainstreaming, instructional program, or student sex.

After three years of experience in the implementation of master plan concepts, regular teacher perceptions of what is important in special education changed. A larger number of basic master plan concepts are now seen as more important than they were in 1974 and the areas in which there were no changes were either those with less direct educational impact or those needs which have been ameliorated with increased funding.

The practical implications of these results are limited. Problems inherent in doing research in an actual school situation were plentiful in this study. Nonparticipation, small sample sizes, and small differences in the basic independent variable were especially problematical. For these reasons the findings reported above, although statistically significant, should be viewed cautiously. Overall, changes in the amount of mainstreaming experienced by individuals with exceptional needs were not often found associated with substantial changes in the quality of school life as perceived by the students, the attitudes of significant others toward mainstreaming, and the acceptance of mainstreamed students by regular class pupils.

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INTRODUCTION

It will be obvious to the knowledgeable reader that no single study, conducted in a single locale, can purport to assess the total impact of a mainstreaming approach in a way which is generalizable to all mainstreaming situations. In the first place, the number of important variables which it is possible to assess is almost limitless. Second, the term "mainstreaming" may actually cover a variety of educational approaches which differ in significant ways from one another in different places. This study, therefore, is concerned with a limited number of variables which might be influenced by utilization of a mainstreaming approach with the explicit understanding that outcomes found in this specific responsible local agency (RLA) may be applicable only to other RLA's similar in student composition, administrative structure, educational delivery, and history of special education services.

Background of the Mainstreaming Issue

Since the advent of special education as a major factor in American public school life there has been disagreement with respect to whether those children defined as exceptional could best be educated with other children who were also exceptional or with nonexceptional children in a regular classroom setting. For the most part, the controversy has generated more heat than light but one thing is clear at this particular moment: those forces which were initially able to impose separate education for the exceptional as the major means of accomplishing the goals of special education have been defeated. At the present time, integrated education, or mainstreaming, is the law of the land. The reasons for this turnabout are complex and perhaps no agreement can be reached on why or how it has occurred.

It is clear that the final decision to minimize segregated education for the exceptional did not stem from a professionally conducted body of research which clearly demonstrated the superiority of the mainstreaming approach. The events which culminated in the passage of Public Law 94-142 reflect a coming together of social and political forces. In one sense this is nothing more than an extension of the mode of change and growth which has characterized special education from its beginning. The forces which have resulted in this most recent change in special education are conceptually identical to those which initiated the special education movement. It was the parents of mentally retarded children who through social, legal and political pressure brought about the first large scale introduction of special education classes in public school systems in the mid 1940s. Then, as now, educators were more bystanders than active participants in the process and, then as now, fundamental decisions were made on emotional grounds.

In special education, as in other aspects of life, the American intention to do good has far outstripped systematic attempts to determine what kinds of educational settings would be most effective with what kinds of children. Hundreds of millions have been spent in the provision of educational opportunities for the exceptional while only a pittance, relatively speaking, has been spent on attempts to learn what specific programs would be effective with specific individuals.

It is difficult to determine precisely when the tide began to turn on the segregationist approach to special education. Many point to the 1954 Supreme Court decision in Brown v. the Board of Education in which it was declared that education, ..."is a right which must be made available to all on equal terms." This legal precept was not applied to the exceptional at that time, however, and lay dormant until the Wright decision in the case of Hobson vs. Hansen which abolished the tracking system in the District of Columbia in 1967. (Kirp, 1974) This was a clear cut case of moving to integrate children of supposedly differing abilities. Since that time, courts have rendered a variety of decisions which have made it clear that from a legal point of view every citizen has the right to as much education as they are able to profit from and, further, that schools may not discriminate against children on the basis of any kind of individual differences.

At about the same time the Wright decision occurred, one body of professional sentiment appeared to coalesce within the field of special education itself. Many hold that this coalescence occurred as the result of an article published by Lloyd Dunn (1968) which focused attention on the shortcomings of segregated education for the mildly retarded. Since that time, there has been a wide variety of articles pro and con dealing with what is usually referred to as the efficacy of special education in its various forms. At this point, it is inconceivable that the objective observer could take a hard and fast position with respect to which method or combination of methods is most effective with specific exceptional children.

Now, education is confronted with the necessity of integrating and reintegrating exceptional children within the framework of regular public education to the greatest extent possible. If this massive change is viewed as an opportunity to assess outcomes and if support for such assessment is forthcoming, it may be possible within the next few years to make more definitive statements about the outcomes of integrated special education programs. The present study represents a small step in that direction.

The Present Study

The specific purposes of the present study include the following: 1) To determine the extent to which special education children mainstreamed in varying degrees are accepted by regular education children; 2) to determine whether or not the extent to which mainstreamed children are accepted by regular education children has shifted in a specific school setting which has been emphasizing mainstreaming for a period of three years; 3) to determine the attitude of parents of special education children who are mainstreamed in varying degrees toward the mainstreaming concept; 4) to determine the attitudes of regular class teachers toward the mainstreaming concept; 5) to determine the perceptions of the quality of school life held by exceptional children who are mainstreamed in varying degrees; 6) to determine the perceived needs of regular class teachers for special education services after having been exposed for three years to a program emphasizing mainstreaming; 7) to determine whether or not the perceived needs of regular class teachers for special education services have changed over a period of four years since the advent of an integrated special education program; 8) to determine the relationship of individual educational plans to variations in mainstreaming experience.

The study was conducted in a responsible local agency (RLA) comprised of 16 different districts of varying size. At the time the study was carried out, the district was in its third year of full scale implementation of a program of special education intended to meet the requirements of Public Law 94-142 and of California Assembly Bills 4040 and 1250. This RLA was one of the six original pilot districts in California.

Immediately prior to the implementation of the new special education program a needs study was conducted across all 16 districts among professional education personnel. In the first year of implementation of the new program a sociometric study of mainstreaming special education children was conducted. Utilizing the data from these two studies it will be possible to determine whether or not changes have occurred in the perceived needs of teachers for special education services and in the acceptance by regular class children of special education children.

A major problem in prior studies of integrated special education has been failure to define what integrated meant and to differentiate among different levels of integration. In the present study, integration will be defined in terms of the number of minutes per day which special education children spend in contact with regular class children in regular classes, physical education and recess activities.

This is the measurement of integration used by the State of California to monitor compliance with mainstreaming requirements. Time spent in *integrated transportation* and lunch room activities is not taken into account. Two groups of integrated special education children will be identified. These include the following: 1) children who have moved toward more integration since the Spring 1977 review of their IEPs and 2) children who have moved away from more integration since the Spring 1977 review of their IEPs.

Through examination of children who are in one of these two groups it should be possible to determine more adequately the relationship of integration with sociometric status, individual educational plans, the attitudes of parents and teachers toward mainstreaming and the satisfaction of the children themselves with their own educational placement.

REVIEW OF THE LITERATURE

The literature review, while not all inclusive, is intended to be representative. Major studies and major approaches in various areas are covered. Some areas included in the present study are not well represented in the literature. This is true of the satisfaction of children with their special education placement and of teacher and parent attitudes toward mainstreaming. Other areas considered by this study, such as acceptance of special education children by regular children are found in abundance in the professional literature. In addition to cataloging research which has been done in relevant areas this review will also attempt to account for apparently contradictory results.

The Acceptance of Integrated Special Education Children

Studies in this broad area tend to be of two general types. The first of these employs a typical sociometric approach in which individuals in direct contact with special education children are asked to respond directly to such children by making some form of sociometric choice.

The second general type of study is the attitude questionnaire in which the respondent indicates preferences of one kind of another with respect to exceptional children. Respondents may be either adults or children. This form of study can be further broken down into two sub types. In the first, the respondent is actually in a situation with the exceptional. The respondent may or may not be aware of the situation but nevertheless, exceptional individuals are in the respondents' environment. For convenience, this will be referred to as a concrete attitude study. In the second form of attitude study, exceptional individuals are not necessarily in the respondent's environment. In such studies, regular class teachers might, for example, be asked how they would feel if educable mentally retarded children were to be placed in regular classes. In this type of attitude study respondents are asked to react to an abstraction and for this reason will be referred to as abstract attitude studies.

Another characteristic of the attitude type of study, both concrete and abstract, is that they tend to utilize broad, global descriptions of the exceptional rather than specific behavioral descriptors. Participants in such a study might be asked for example, how they feel about "the mentally retarded" on the apparent assumptions that retarded persons are like one another and that the concept "mental retardation" has the same meaning to all respondents. Outcomes of such an approach would appear to be highly determined by whatever stereotypes or biases that particular respondents might hold. Gottlieb (1975) has explored this issue.

Sociometric studies of integrated exceptional children. Sociometric studies of the exceptional are of particular interest since this technique was used in the conduct of the present study. It should be emphasized that the basic question to be answered with respect to the social acceptance of the exceptional is: Does increased integration with regular children increase, decrease, or fail to effect the social acceptance of the exceptional? A major problem in this regard, and throughout all studies on mainstreaming of the exceptional, is that children are often defined as simply "integrated" or "segregated" without more specific indications as to the degree of integration or segregation. Is a child "segregated" who may have all academic work with exceptional children but who rides a bus, participates in playground activities, eats lunch and otherwise is integrated with the non-exceptional? Unfortunately, almost no research reported on mainstreaming addresses the problem of degree of integration and few studies define precisely the extent to which the population studied was integrated.

Most research utilizing sociometry with exceptional children has examined the social acceptance of the retarded but studies on the visually impaired, hearing impaired, physically handicapped and emotionally disturbed are also available. The term sociometry is used broadly in the present context. It includes any type of measure which requires one individual to make specific choices of individuals from among a larger group. Methodology ranges from a traditional Moreno approach to somewhat more standardized approaches such as the Ohio Social Acceptance Scale and the Ohio Social Recognition Scale.

One of the first sociometric studies of the retarded was that of Johnson (1950). He found that acceptance of retarded children in regular classrooms was considerably lower than that of regular class children in the same classrooms. He also found that the social acceptance of retarded children increased as their ability level increased and that acceptance was higher in the lower grades than in the upper elementary grades. Baldwin (1958) conducted a study of 31 mentally retarded children in the upper elementary grades in 10 different elementary schools. Utilizing two standardized sociometric measures it was concluded, as Johnson had concluded, that the degree of social acceptance of the mentally retarded in regular classes was much lower than that of non-retarded children. Unlike Johnson, however, Baldwin concluded that level of mental retardation was not related to degree of social acceptance.

Since Johnson's study in 1950, the majority of sociometric studies of the retarded have tended to follow a similar pattern. That is to say, they have focused essentially on a broad general question of whether or not mentally retarded children are more or less accepted by their peers in integrated or partially integrated situations.

One of the more adequately designed studies was conducted by Miller (1956) in which he examined sociometric differences among groups of superior, average, and mentally retarded children. He found that the children he defined as superior were most wanted as friends and the retarded were least wanted. He also concluded that the superior had a higher level of social awareness while the retarded appeared to lack such awareness.

In another study reported in 1956, Force examined the social status of 63 physically handicapped children in grades 1-6 using a "near sociometric" instrument. All had normal intelligence and were integrated with normal children. The concepts "friends", "workmates" and "playmates" were examined for each of 14 classes; 15 of the 42 comparisons were significant at the .05 level or less. There appeared to be a hierarchy of rejection with cerebral palsy and hearing defective children receiving the lowest number of choices. Children with cardiac conditions and congenital anomalies were most accepted.

A sociometric study of 16 slow learning children was conducted by Lapp (1957). These children were integrated in some non-academic and academic aspects of the school. The IQ range was from 50 to 92. Using the same technique as Johnson (1950), it was found that acceptance scores of the slow learner group were lower than chance, while rejection scores did not differ significantly. Lapp concluded that these children were neither disliked nor sought out but rather were "tolerated".

Utilizing what might be called a projective sociometric technique involving pairs of pictures Renz and Simensen (1969) studied the social perception of regular class children toward their EMR grade mates. They concluded that there were no significant differences between whether EMR or regular class children were known better to their classmates and that there was no difference in the favorableness/unfavorableness of descriptions of the EMR and regular class children. This latter conclusion was unique among the sociometric studies reported.

In the same year Rucker, Howe, and Snider (1969) reported using the Ohio Social Acceptance Scale to investigate the sociometric status of 23 partially integrated EMR children in 30 different junior high school classes. The EMR children were significantly less accepted in both academic and non-academic classes. They appeared to be unaware of their low sociometric status. Those EMR children who were more accepted in their special classes also tended to be more accepted in their regular classes.

Monroe and Howe (1971) also used the Ohio Social Acceptance Scale to assess the sociometric status of retarded adolescents integrated at the junior high level. They used the Socioeconomic Index for Occupations to determine socioeconomic status. Their results were similar to those obtained by Rucker, et al (1969). All special education groups had low scores. Those who had been integrated longest tended to have the lowest scores. When viewed from the perspective of socioeconomic status, those lowest on the scale were significantly lower in social acceptance by non special education students.

More recently, Iano (1974) and his associates studied 40 former special class children who were integrated into regular elementary classes with resource room support available. Utilizing an individually administered sociometric interview they reported that a greater percentage of EMR children received high numbers of rejections. They also concluded that the availability of resource room support did not make a difference in sociometric status.

In one of the rare studies contrasting integrated and segregated retarded children on sociometric variables, Gottlieb and Budoff (1973) utilized a sociometric interview technique. They reported that integrated EMR children were rejected more than segregated EMR children. Included in this study was a study of the impact of architectural differences on such acceptance. EMR children in an open classroom setting were rejected more often than children in a traditional school. While EMR children were known more often than non EMR children in the open classroom they were not chosen as friends more often. In terms of sampling, design and analysis, this study appears to be superior to many others.

Some studies suggest a relationship between level of ability and sociometric status. Diggs (1963) found that intelligence and mental age were positively correlated with the social acceptance of integrated retarded children. The studies by Miller (1956) and Johnson (1950) reported findings of a similar nature.

There has been considerable concern over the impact of labeling on exceptional children, but relatively few attempts to study the issue from the point of view of whether it is labels or behaviors which affect the social acceptance of the exceptional. Clark (1964) studied partially integrated EMR children and concluded that they had a peer image based on achieved, not ascribed status. This finding was confirmed by Gottlieb (1974) who emphasized that it was academic deficit, not labels or placement, which stigmatized a child.

Another issue which has been explored in a beginning kind of way is related to differences among various groups of sociometric raters. The Peer Acceptance Scale, an interview type of sociometric device, was used by Goodman, Gottlieb and Harrison (1972) to study the social acceptance of EMR children integrated in an elementary school. The authors expected to find integrated children more accepted than segregated children, but they found the reverse to be the case, particularly among regular class males. In addition, integrated EMR's were found to be chosen as friends less often, they were "not liked" significantly more, and females accepted EMRs as "all right" significantly more than males. Younger children were found to be more accepting than older children.

It might be noted at this point that Johnson's study (1950) likewise indicated a decrease in social acceptance with increase in grade level. These findings appear to suggest that sex and age of a rater may influence the favorableness of sociometric ratings.

Differences in the sociometric ratings of integrated retardates by urban and suburban children were studied by Bruininks, Rynders and Gross (1974). They found that urban children actually rated the retarded group higher than the non-retarded group while the reverse was true of the suburban group. Unfortunately, there appeared to be a significant IQ difference between the two groups of retarded children which favors the urban sample. Results of this study suggest that value systems of raters may play an important part in such ratings. Replication with better controlled samples of retarded children would seem important.

There is also a suggestion from some studies that the better the EMR child is known the poorer will be their sociometric status. This is supported by the findings of Gottlieb and Budoff (1973) reported above, as well as by those studies which demonstrate a decline in social acceptance as the length of time a child has been integrated increases.

Attempts to change the social acceptance of EMR children in regular classes have been conducted with mixed success. Diggs (1963) made such an effort and reported no significant differences. A similar attempt was made by Chaires (1966) with EMR students who had the lowest sociometric ratings in junior high and intermediate schools. He designed special activities in which low rated EMR students participated and reported that their level of social acceptance was raised.

Sociometric studies of exceptional children other than the retarded are more rare but they do exist in relation to the visually handicapped, the hearing handicapped and the emotionally disturbed. Jones and his colleagues (1972) conducted a sociometric study of blind children who were integrated in regular classrooms. Unfortunately, the data did not lend themselves to statistical analysis. Subjective scanning of the results indicate a wide range of sociometric acceptance among the 20 blind children but also suggests that they tend to be less accepted than their sighted peers. There is further suggestion in the data that when they are accepted it tends to be by sighted children who are themselves less accepted. Using a modified sociometric scale Eaglestein (1975) assessed the sociometric status of nine blind males among 155 sighted males in an upper middle class school in Israel. Results indicated that blind students were not accepted often as best friends but they were above the median in general acceptance. They were rejected as work mates significantly more than their sighted peers and the longer a blind student was known the lower his sociometric rating was likely to be.

A study of the social status of the hearing impaired children in regular classrooms was conducted by Kennedy and Bruininks (1974). Fifteen hearing impaired children with normal intelligence were placed in 13 elementary classrooms with a total of 277 normal hearing classmates. All hearing impaired children wore hearing aids and received daily tutoring outside the classroom. Children with severe to profound losses were nominated more often as friends than normal hearing children and children with mild to moderate losses appeared to be less accepted than those with severe to profound losses. In another study of 11 children who were severely to profoundly deaf Kennedy, et al (1976) reported that the social status of these children tended to decrease over a 3-year period; what began as high social status in 1972 deteriorated to a low social status in 1975. Using a less open-ended forced choice social acceptance technique they also concluded that peer acceptance was not significantly different from that of normal hearing children over a three year period.

A study of the sociometric status of emotionally disturbed children in regular and special classes was conducted by Vacc (1971). He concluded that the emotionally disturbed children in regular classes were less accepted and more rejected than normal children in the classes. He further concluded that the emotionally disturbed children in regular classes showed negative changes in social behavior while those in special classes showed positive changes.

The studies cited above represent a fair cross section of the sociometric findings with respect to integrated exceptional children. Is there any pattern that exists in these studies or any trends that suggest at least hypotheses for further research? It would seem that there are. Generally speaking, sociometric studies, with few exceptions, suggest that mainstreamed EMR children occupy a lower sociometric status than do regular children in their classes. The limited information available with respect to the emotionally disturbed suggests a similar situation with that group.

The evidence with respect to other kinds of exceptionalities is less clear. Neither the Jones, et al (1972) nor the Eaglestein (1975) studies meet desirable criteria for research design. Hence, caution must be applied in utilizing results. These results do suggest that the blind may find more difficulty in gaining long term acceptance from their peers. The sociometric status of hearing impaired children is also open to question. When acquaintance with hearing impaired children over time is considered it appears that these children may move from relatively favorable to relatively unfavorable sociometric status. It is also possible that those with more severe losses are more accepted than those with moderate losses. The physically handicapped, like other groups of the exceptional, appear to be less well accepted than regular children although there appears to be a hierarchy of acceptance based on the type of disability.

In summary, it appears that exceptional children, particularly those with less obvious kinds of disabilities such as the educable retarded and the emotionally disturbed, have greater problems in gaining acceptance from their regular class peers. Several studies also suggest that the sociometric position of the exceptional may deteriorate over time when they stay with the same group. Another interpretation of this phenomenon is possible. Perhaps it is not length of acquaintance but rather the factor of increased age and therefore, of changing social standards which creates the problem. Longitudinal and experimental analysis of the sociometric status of integrated exceptional children would help to resolve this issue. Another kind of difference between raters which appears to influence sociometric choices is based on sex, with females apparently being less swayed by exceptional characteristics than males in making choices.

The data also suggest that labels, the subject of so much emotion, may not be the primary factor in sociometric ratings assigned by children. Rather it appears that actual behaviors are more important. This possibility is suggested by those studies which have found a relationship between level of ability and sociometric status.

Attitudinal studies of integrated exceptional children. In contrast to the relatively direct approach of sociometry, the use of attitude type measures to assess feelings toward exceptional children may be so surrounded by problems as to make constructive use of results almost impossible. The comparison of one attitude scale with another is a well nigh impossible task, given the range of differences possible from one scale to another. A second problem, already alluded to, is that which Gottlieb (1975, p. 100) has referred to as the object referent. He notes the failure in most studies, specifically with respect to the retarded, to take into account precise characteristics of individuals who are referenced by attitude studies. The general approach is to ask the respondent their attitudes toward the "mentally retarded" or the "disabled" or the "exceptional" rather than providing specific behavioral descriptors for response. This approach has the unfortunate effect of bringing into play whatever global preconceptions, biases or prejudices an individual may have with respect to such a group. Certainly it makes the interpretation of results a difficult process and the comparison of one study with another almost impossible.

A third general problem with such studies is that some are carried out in situations where the respondents are in contact with exceptional groups, while others are carried out with respondents who are not in regular contact, or, indeed, may not be in contact at all. The two different approaches have previously been labeled abstract and concrete respectively and that differentiation will be retained in this section. The situation is further complicated by the fact that still a third class of studies exist in which one group of respondents is in contact with the exceptional while another may not be in contact at all. The comparison of the results of these three different types of studies is inappropriate.

A fourth complicating factor in attempting to make sense out of the various attitude studies is that they are often carried out in situations where the respondents, teachers for example, know that certain children in their classes have recently come from special classes.

for the exceptional. In such cases it is difficult to separate attitudes toward the exceptional individual from more general attitudes and feelings about the current thrust towards mainstreaming. This obvious confounding makes interpretation of such results difficult; it makes the comparison of studies of this type with attitude studies carried out in situations where the respondents do not know about the prior history of integrated children an impossible task.

Finally, an obvious difficulty resides in the fact that it is questionable as to whether the results of attitude studies based on one type of exceptionality are comparable with the results of attitude studies based on another type of exceptionality. There is evidence to suggest that the concept "mental retardation" evokes a different set of responses than the concept "emotionally disturbed".

Although this review is fundamentally concerned with attitudes toward mainstreamed exceptional children in the school setting a brief consideration of more general public attitudes will be presented since these attitudes provide the background from which the attitudes of those in contact with children in the school setting arise. In a study of community attitudes toward slow learners and mental retardates, Hollinger and Jones (1970) assessed the attitudes of 114 randomly selected residents of a small midwestern town. All respondents were over high school age. The authors reported that younger respondents were both more positive toward and more knowledgeable about slow learners than were older respondents. Those males with slow learners in the family had more positive attitudes than both males and females who did not have a slow learner in the family. They further found that the term slow learner was more acceptable than mental retardate. An additional finding was that respondents agreed that slow learners could finish college. The Hollinger and Jones study is representative of those attitudinal studies which have been defined as abstract in nature.

In another abstract type of study, Ringo (1970) utilized a social distance scale to determine whether there was a hierarchy of preference toward different types of disabilities. Results confirmed this hypothesis. The alcoholic, cerebral palsied, mentally ill and mentally retarded were at the lower end of the scale. High school students were less accepting than a group of physical therapists, a college graduate group and three college level groups. Females were significantly more accepting than males.

In a study which can be defined as concrete Yuker, Block amd Young (1970)[1] report that increased equal-status contact between disabled and nondisabled persons was related to more positive attitudes toward the disabled. Less positive attitudes were related to contact between the disabled and nondisabled in medical and rehabilitation settings. It is possible that the latter situation may be analogous to the school situation in which the exceptional individual may be viewed as one to be treated or rehabilitated. One limitation in the interpretation of the results of this study is that the instrument used (Attitude Toward Disabled Persons Scale) uses the term "disabled" as the object referent throughout.

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[1] The extensive work of these authors in the development and use of the Attitude Toward Disabled Persons Scale cannot be appropriately covered here. However, it is recommended that the interested reader consult both this reference and in addition consult the publication by J. Richard Block entitled Recent Research with the Attitude Towards Disabled Persons Scale: Some Research Abstracts, published by the Human Resources Center, Albertson, New York, 11507, 1974. These two publications should be considered required reading for the individual interested in attitude studies of the disabled.

As a result of a study of public attitudes of both those who had some contact with the retarded and those who had not Gottlieb and Corman (1975) developed a four factor scale for assessing such attitudes. They reported that older respondents, the parents of school aged children and people with no previous contact with a retarded person tended to favor segregation of retarded children in the community. Males and females did not differ in the favorableness or unfavorableness of their attitudes toward integration in the classroom or in their perception of the mentally retarded as handicapped. This study suggests that lack of previous contact with the mentally retarded did effect attitudes toward segregation in the community. It should be added that this study, although generally well designed, used somewhat less than adequate sampling procedure.

The attitudes of the general public, as reflected in the studies cited, suggest that increased peer type contact may increase acceptance of the exceptional while contact in a treatment or remedial setting may bring about more negative kinds of attitudes. These studies suggest, even more clearly, that older respondents hold more negative attitudes than younger ones. It was also found that more highly educated respondents seem more accepting than less educated ones. There also appears to be a hierarchy of acceptance with some disabilities less accepted than others. Additionally, the terminology used to describe the exceptional appears to have an impact on the perceptions of those who have no first hand experience of various exceptional groups. It is less certain that such terminology effects the perceptions of those who do have contact.

A number of studies have been carried out on the attitudes of teachers toward the exceptional. Two studies which have been defined as abstract in their overall approach will be reviewed. Combs and Harper (1967) reported that mentally retarded children were viewed more positively when they were labeled than when they were not. The label appeared to excuse the behavior. They provided labeled and unlabeled descriptions of mentally retarded children to 160 educators and asked them to rate these cases using a 25 item adjective rating scale. Eighty of the respondents were experienced in education and 80 were inexperienced but amount of experience was unrelated to the perceptions of these respondents. In another abstract type of study of the attitudes of educators toward the retarded, Efron and Efron (1967) conducted a factor analysis of a scale to assess these attitudes. They reported that the factor contributing fundamentally to the variance in this scale reflected a belief that the mentally retarded are dangerous to society, have a hopeless prognosis and require segregated facilities for their care.

Concrete studies of teacher attitudes are essentially studies carried out where teachers are currently having the experience of dealing with exceptional children in the regular classroom situation. Using a small sample of regular and special class teachers Fine (1967) demonstrated that these two types of teachers held different expectations for educable mentally retarded children. The special class teachers placed greater emphasis on personal and social adjustment and were also less demanding academically than the regular class teachers. In spite of the different expectations of regular and special education teachers reported by Fine, it was reported by Conine (1969) that regular elementary teachers were neither accepting nor rejecting of mentally retarded children. In contrast to this finding, Rist (1970) found that kindergarten teachers tended to have negative attitudes toward children based on their physical appearance, socio-economic status, language dialect and social behavior. Rist concluded that a student's social class effected teacher acceptance but it could just also have been concluded that some of the characteristics associated with exceptionality also bring about negative teacher attitudes. Teachers in the Fountain Valley School District (1972) indicated no difference in the favorableness or unfavorableness with which they viewed integrated educable mentally retarded and educationally handicapped children compared to regular class children; these teachers did have a resource teacher available to them.

A well designed study by Shotel, Iano and McGettigan (1972) explored the attitude of 128 classroom teachers in six elementary schools. Three of the schools were involved in the first year of mainstreaming and three had self-contained special classes. Few teachers in either type of school felt competent to teach EMR students but a majority did feel competent to teach learning disabled students. The overwhelming majority of teachers felt that special methods and materials were needed for any group of special education students. The provision of assistance, in the form of resource rooms, led to an improvement in the attitude of teachers in the mainstreaming schools after exposure to a year of mainstreaming, in fact, the authors report that the attitudes of experimental group teachers became more negative on all measures and those of control teachers more positive following a full year. Somewhat parallel findings were reported by Bradfield, et al (1973). In a larger study concerned primarily with achievement of special class and integrated exceptional children, they reported that small but negative changes took place over time in teacher attitudes toward having exceptional children in the regular classroom.

An interesting finding was reported by Flynn (1974) with regard to teacher attitudes and perceived achievement. Using a group of EMR children already attending part-time special education, a group of children identified as EMR but still in regular classes and a group of regular class children he found that a significantly higher proportion of the waiting list group than of the special education group was promoted. It was concluded that the teachers appeared to use the EMR label as a criterion in deciding against promotion. In a study with some methodological problems Guerin and Szatlocky (1974) reported that members of the same school staff tend to have similar attitudes toward the mildly retarded. Smith and Greenberg (1974) conducted a study of the impact of socio-economic level of children on teacher attitudes. They concluded that children from lower socioeconomic levels were judged mentally retarded more frequently than children with similar characteristics from middle socioeconomic levels.

The effect of integration of special education children on teacher attitudes was studied by Harasymiw and Horne (1975). Using five schools with partial integration and six schools without integration they administered a 52 item questionnaire to the teachers in these 11 schools. They concluded that teachers at the partially integrated schools had more favorable attitudes towards special education children than did teachers at the non-integrated schools. They found no differences between male and female teachers with respect to favorableness or unfavorableness toward special education children. This finding parallels that of Gottlieb and Corman cited above. They also reported finding teachers with less formal professional education as having more favorable attitudes toward special education children than those with more, although education was confounded with age. They felt that a training program had been important in determining the positiveness of the responses of the experimental teachers.

Any conclusions drawn on the basis of the attitude type studies should be regarded as extremely tentative. It seems reasonably clear that teacher attitudes toward exceptional children, and consequently towards mainstreaming, are effected by the social class of specific children, differing types of exceptionality, amount and type of contact teachers have had with the exceptional, and the age level or education of the respondent. It appears that teachers are more negative towards the mentally retarded than some other types of exceptionalities. The attitudes of teachers responding in the abstract appear to be somewhat more positive toward the exceptional than the attitudes of teachers who have exceptional children integrated in their classes. It seems likely, also, that among regular teachers who have exceptional children in their classes attitudinal responses toward the exceptional may be more favorable at the outset than after continued exposure. The availability of certain kinds of special help, such as a resource teacher, appears to assist in the creation of more positive teacher attitudes towards integration and, by inference at least, toward the exceptional as a group. The issue of male and female teacher responses to the exceptional remains problematical. Different studies report different results and no clear ground exists for saying one finding is better than another.

Studies of the attitudes of regular class students toward the exceptional have been carried out in the abstract as well as in concrete situations and four studies will be reported which include both. An example of a study done in the abstract is represented by Jones, Gottfried, and Owens (1966). The respondents to their questionnaire were 186 students in grades 9 through 12 in a small midwestern high school. Twelve groups, including the average and the gifted child, were covered by their questionnaire. The other 10 categories were those ordinarily considered to include the exceptional. The gifted and the average were clearly viewed more positively. The severely retarded were clearly at the bottom of the scale. The mildly retarded, emotionally disturbed and delinquent tended to be at the bottom of the scale and the speech handicapped, hard of hearing, and partially sighted tended to be at the top of the scale. The authors also reported great male-female differences in attitudes with females generally the more accepting.

Concrete studies of student attitudes toward the exceptional are also available. It was concluded by Fuchigami (1964) that high school aged EMR boys have more nonretarded friends in their neighborhoods than they do in school and that they participated in neighborhood activities more than in school activities. This finding suggests that the school setting may not be as favorable a locus for integration as the community. In a much broader study of the reintegration of EMR children Budoff and Gottlieb (1976) reported that the ex-special class students tended to be socially isolated in free play even though their prior special class placement was unknown to both regular class teachers and children. This finding again suggests that student attitudes may be conditioned by the behavior of the retarded rather than by labels.

Four studies using a combination of the abstract and concrete approach have been reported. Jaffe (1966) carried out a study of adolescents who had social contact with mentally retarded children and another group who had no such contact. The children having had social contact assigned more favorable attributes to the mentally retarded than those who had not had contact. A somewhat similar study was conducted by Strauch (1970) who used the semantic differential to compare the attitudes of regular junior high school students having contact with EMR students in partially integrated programs with the attitudes of regular junior high school students without such contact. The contact and non-contact groups did not differ except on the concept "normal people". Both groups rated the EMR groups lowest, below normal people, regular class pupils, and special class pupils. His conclusion was that contact alone does not establish positive attitudes. These results appear to be in conflict with those of Jaffe.

A well designed study was carried out by Sheare (1974). Four hundred normal ninth grade students were randomly assigned to their classes. Half of the classes had EMR students scheduled into them and half did not. Classes did not include academic courses. Subsequently, both groups of regular students were administered a twenty-five item questionnaire reflecting their attitudes toward EMR students. Responses were anonymous. Analysis of variance revealed main effect differences for treatment and sex significant at the .01 level. Children exposed to EMR children were more accepting than those who were not; females were more accepting than males.

A semantic differential was used by Gottlieb, Cohen and Goldstein (1974) to study the effect of contact with the retarded on the attitudes of children of average intelligence. The study was conducted in three different elementary schools, one of which had no EMR children, one of which had special classes for the retarded, while the third had an integrated program. Results indicated more favorable attitudes among those children with the least contact. A replication of the study supported this finding.

Studies of the attitudes of students towards the exceptional seem to suggest that regular students differentiate among various kinds of exceptionality and that a hierarchy of preference or rejection exists. It would appear that the retarded tend to be more rejected than some other groups and the more severe the retardation the greater the rejection is likely to be. There is at least a suggestion that the school setting, as usually structured, may not be conductive to assisting the exceptional to gain acceptance from regular class students.

Whether this is due to the task of the school or to its structure is not possible to say. There are conflicting results on the issue of whether contact with the exceptional might affect their acceptance by regular students; no clear answer to this question appears in the literature on attitude surveys. Regular female students are generally reported to be more accepting of the exceptional than regular male students.

Parent and Teacher Attitudes Toward Mainstreaming

There are almost no studies worthy of report which bear directly on the question of parent or teacher attitudes toward mainstreaming. This is probably due to the relative newness of the mainstreaming emphasis. It seems clear to professional educators, however, that the attitudes of the regular classroom teacher will have a great deal to do with the effectiveness of the mainstreaming effort. Teacher attitudes may be one of the major determinants of the longevity of the practice of mainstreaming in the public school system.

As parent participation in the public school system is implemented more broadly, it seems probable that the attitudes of the parents of exceptional children, and very possibly the attitudes of the parents of regular class children, may also have an impact on the effectiveness and longevity of the mainstreaming effort. As a consequence of the potential influence of teacher and parent attitudes toward mainstreaming, it is to be expected that the number of studies of these attitudes will increase in the immediate future. For the present, however, there are few to be reported.

Teacher attitudes toward mainstreaming. At the outset, it must be pointed out that it is not only difficult, but in some cases, impossible to separate studies of teacher attitudes toward exceptional children and teacher attitudes toward mainstreaming. Another caveat which must be mentioned in connection with these studies is that it appears possible that experimenter bias, usually in favor of mainstreaming, may be a factor to be taken into account in the conclusions drawn from some studies in this area.

A study by Sattler and Notari (1973) utilized a partially structured interview with 29 teachers from four different school districts to assess attitudes towards the integration of exceptional children in regular classes. The authors concluded that everyone was highly favorable to integration but these conclusions appeared to be over-emphatic in light of the bias possible in the interviews, the poor sample, and the relatively low rate of interviewee response in certain categories. Similarly, favorable conclusions were reached by Johnston (1972) who used an opinionnaire to assess regular class teacher attitudes toward integration. This study concluded, "...teachers did not find having a special student in the class a problem." Such a strong conclusion did not appear warranted due to methodological problems in the conduct of the study.

Teacher attitudes toward preferred treatment of moderately disturbed children were assessed by Gullota (1974) using 50 student teachers as respondents. Using a case history of an acting out male with four different versions, respondents were asked to respond to 10 different suggested solutions, five of which handled the problem within the school and five of which handled the problem outside the school. Those solutions deemed satisfactory by each group required some services outside the schools although the respondents did indicate that they would keep the child in the regular classroom provided they had special assistance. Stricter discipline and residential care as possible solutions for these children were overwhelmingly rejected.

On the other side of the coin, Gickling and Theobald (1975) conducted a study in which 400 questionnaires were sent to a randomly selected population of teachers representing rural and urban areas. Questionnaires were returned anonymously by 326 respondents. The authors concluded that 60% of the participating regular class teachers were satisfied with special classes while only 40% favored mainstreaming. Regular class teachers consistently reported that they did not have the skills required to teach special education students. The data treatment in this study was relatively unsophisticated and caution in interpreting these results seems appropriate.

An attempt to influence the perceptions of administrators and regular class teachers was reported by Brooks and Bransford (1971). Twenty regular class teachers and 10 administrators participated in an intensive summer institute which involved practical experience with the exceptional, participation in sensitivity sessions, and participation in a four week workshop aimed at special education in the regular classroom. They used eight different semantic differential concepts and collected data prior to and following the summer institute. T-tests indicated pre-post differences in a positive direction on three concepts including special education, prevention, and integration.

One of the most extensive studies of teacher attitudes towards mainstreaming has been reported by Watson and Hewett (1976). They were careful to describe their study as exploratory. These authors developed an inventory consisting of brief descriptions of six different mildly handicapped male children. Respondents were asked to complete 29 items reflecting their opinions with respect to the impact of such a child on the teacher, on the other children in the class and on the learning handicapped child himself. A total of 1,028 teachers were sampled from 55 schools in 18 school districts. Only 872 of the returned inventories could be utilized due to lack of complete information on the others. Although all participating districts had previously been selected for development of mainstreaming programs, it was not made clear how far each district had gone toward implementing mainstreaming. Hence, it is probable that some teachers were responding on what we have previously called an abstract basis while others were responding on the basis of more concrete experience with mainstreamed children. The authors concluded that their regular class teacher respondents are somewhat favorable when asked about the impact of mainstreaming on a mildly learning handicapped male child but somewhat more ambivalent when responding to items which relate to the actual fact of mainstreaming in one of their classes. Some surprising grade level differences were reported with respect to teacher beliefs about the effects of mainstreaming. Teachers of children from kindergarten through grades three and four were considerably less favorable regarding the effects of mainstreaming than were teachers of grades four through six and seven. High school level teachers were generally unfavorable with respect to beliefs about the effectiveness of mainstreaming.

Teachers did differentiate among the various types of learning handicaps. The "true" mentally retarded child was judged to be the one who would suffer most and profit least from integration. Teachers also rated the learning prognosis for an acting out child and a hyperactive child relatively unfavorably. They differentiated significantly between a true mentally retarded child and a child from a bilingual background who attained the same I. Q. score.

The results of these few studies, which differ markedly in their sophistication of design and data treatment, are so diverse as to prohibit firm conclusions at this point with respect to general teacher attitudes toward mainstreaming. It is no criticism of the authors of these studies, faced with all the problems of conducting in vivo research, to point out that problems of sampling, design and data treatment add to the difficulty of interpretation. Likewise, the difficulty of knowing the extent to which teachers are actually participating in mainstreaming and the effect that this might have on responses adds to the interpretive problem.

Outcomes of studies of teacher attitudes toward the exceptional previously described suggest that contact with the exceptional over longer periods of time results in more negative attitudes on the part of the regular classroom teacher; the reverse may be true in studies of attitudes toward the concept of mainstreaming. Results suggest that mainstreaming will work best where programs are conducted to prepare the regular classroom teacher for the advent of mainstreaming and where there are effective resources outside of the regular classroom to provide assistance with integrated exceptional children.

Parent attitudes toward mainstreaming. The available material pertaining to parent attitudes toward mainstreaming is slim indeed but it is probable that as mandated parent participation in special education programs becomes a reality there will be more research in this area. Only one research study bearing on this issue can currently be reported. In 1967 Meyerowitz conducted a study focused primarily on parental awareness of the retardation of their children. Some aspects of this study relate to parent attitudes toward mainstreaming. A group of 120 educable mentally retarded children were randomly placed either in a regular first grade or a special class. A group of 60 normal first graders matched on socioeconomic status served as controls. Parents were queried at three points during the first two school years with respect to their child's mental retardation and the implications of this condition for their future. The parents of children in special classes manifested a greater awareness of their retardation than did parents of retarded children in regular classes. Parents in both experimental groups held life expectations for their children which did not differ from the parents of the normal group but, at the same time, parents of both retarded groups recognized that their children were expected to complete fewer years of schooling than nonexceptional children.

The Attitudes of Exceptional Children Toward School

As with the studies of teacher and parent attitudes toward integration there are few studies of student attitudes toward integration and those which exist are not comparable with each other due to differences in methodology or populations chosen for study.

Hayball and Dilling (1969) used an interview technique to determine the attitudes of special education students toward their education. The respondents were students who had previously been in special classes but who had been returned to regular classes. Generally speaking, the 57 subjects of this study could probably be considered to have relatively mild learning handicaps. The authors reported positive responses to being in the regular class and to other children. These replaced special education children reported that the regular class children were their friends. The regular class teachers supported this latter conclusion according to the authors.

Folman and Budoff (1972) assessed the attitudes of a group of low achieving regular class students and special class EMR students toward school. The mean I. Q. of each group was 92 and 70, respectively. While both groups aspired to finish high school, the regular class students actually expected more often to do so. Fewer special than regular class students saw a relationship between school and their future lives but more special than regular class students saw themselves as better academically than their friends or classmates. There were relatively strong relationships between the responses of more able special class students and those of low achieving students in regular classes.

Two studies have been reported which assess the attitudes of special education children who are not integrated. Guthrey (1971) used an attitude survey with 85 normal, 47 educationally handicapped and 16 mentally retarded students. The survey used called for responses to teacher, school and academic dimensions. Guthrey reported differences between normal and educationally handicapped students on all three dimensions and differences between normal and mentally retarded students on the school and academic dimensions. Both the educationally handicapped and mentally retarded expressed more negative attitudes than did the normal participants. An interview study, carried out with 369 children in special classes for the educable retarded was reported by Warner, Thrapp, and Walsh (1973). They used five open ended questions reflecting the feelings of these students about their special class placements. Sixty-one percent reported that they liked their special classes and the younger the respondent the more favorable was their opinion of the class. No contrast with integrated special education students was made.

General conclusions would be inappropriate on the basis of existing research in this area. This is due to the lack of research as well as differences in design, samples and instrumentation.

METHOD

Subjects and Sampling Procedures

Individuals with exceptional needs (IWENS). Two groups of special education students were identified in this study. One group represented students whose current involvement in mainstreaming was greater than it had been in the previous year. The other group of students represented those whose involvement in mainstreaming was the same as or less than it had been the previous year.

The subject sample was drawn from the population of Contra Costa County RLA students who satisfied the following criteria.

1. Received Designated Instructional Services through Individual and Small Group Instruction (DIS[IGI]), or Designated Instructional Services for Speech and Language (DIS [S & L]), or Resource Specialist services between October 3, 1977 and October 28, 1977 inclusive.
2. Were integrated or mainstreamed in regular, non-special education, grade four classes during the same period identified in number one above.
3. Had an individual education plan (IEP) written for them on record during the above time period.
4. Received special education services between January 17, 1977 and January 28, 1977 inclusive during the prior academic year.

All students in the above population were measured for the purpose of assessing shifts toward and away from mainstreaming. These measures were based on the State of California Integration Measurement (CPS-1 Form E-4 series) of minutes per day spent with regular pupils. An index number was constructed for each student by first subtracting the average daily number of January 1977 minutes of special education services from the average daily October 1977 minutes and then adding a constant of 50 in order to eliminate negative numbers. It was assumed that the more time a student spent in segregated special education services, the less time that was spent integrated with regular students. Low index numbers represent students who have been shifted toward more mainstreaming and away from direct service. High index numbers represent the opposite shift: students receiving more direct service and less mainstreaming. Table 1 presents a description of the student population which meets selection criteria in regard to the measurements described above. Appendix A reports similar measurements for all students served in the RLA.

The sample studied in this project was taken from the population defined. A random sample of size 4 was drawn from each of the 12 strata identified in Table 1. Student and family mobility, educational program changes, and refusals to participate caused many losses of the students drawn in the original sampling plan. Overall, 31% of the initial sample was unavoidably lost. Where possible, each lost student was replaced with a new student randomly selected from the appropriate original population stratum. A sample size of 4 in each cell was determined on the pragmatic basis that this represented the maximum number of children available in one of the 12 cells. Two of the cells contain less than 4 subjects because children initially selected were unavoidably lost and replacements were not available. The original intention of carrying out an equal N analysis could not be met. Table 2 presents basic statistics for the final sample of students studied in this project.

Regular student sample. One objective in this study involved the sociometric appraisal of "liking" of the individuals with exceptional needs (IWEN) by other students. The sample of regularly enrolled students used were grade 4 classmates of all IWENs identified in Table 2.

Parent sample. Another study objective involved the assessment of attitudes toward mainstreaming. Parents of the sampled IWENs were invited to participate in this aspect of the study.

TABLE 1. Integration (Mainstreaming) Statistics for Student Population in October, 1977.

Instructional Program	Student Sex	Shift*	Subgroup Size	Avg. Daily Minutes		Index Number
				Segregated	Integrated	
DIS (I.G.I.)	Boys	More	22	24	263	30
		Less	30	51	246	67
	Girls	More	4	17	245	25
		Less	12	53	240	75
DIS (Sp. and Lang)	Boys	More	15	5	283	38
		Less	13	11	289	53
	Girls	More	11	4	281	43
		Less	6	18	296	58
Resource Specialist	Boys	More	46	20	279	33
		Less	31	34	260	66
	Girls	More	12	14	293	25
		Less	15	44	259	79

* "More" means the student spent more instructional time with regular students than was spent the prior year. "Less" means the opposite.

TABLE 2. Integration (Mainstreaming) Statistics for Student Sample in October, 1977.

Instructional Program	Student Sex	Shift*	Subgroup Size	Avg. Daily Minutes Segregated	Avg. Daily Minutes Integrated	Index Number
DIS (I.G.I.	Boys	More	4	14	260	29
		Less	4	44	255	62
	Girls	More	2	8	222	35
		Less	4	52	253	73
DIS (Sp. and Lang)	Boys	More	4	5	275	44
		Less	4	13	273	54
	Girls	More	4	4	277	42
		Less	3	25	285	62
Resource Specialist	Boys	More	4	17	279	38
		Less	4	38	261	74
	Girls	More	4	23	314	11
		Less	4	51	243	74

* "More" means the student spent more instructional time with regular students than was spent the prior year. "Less" means the opposite.

Teacher sample. Teacher samples were needed to assess both attitudes toward mainstreaming as described above and the importance of selected special education needs. The regular grade 4 classroom teachers of the integrated IWENs were selected for the teacher sample. Additionally, each of these teachers was asked to identify another teacher on their own campus to take the Needs Survey. Obviously, the original teacher sample, by definition, had had experience with mainstreaming. The purpose of identifying the second sample of teachers was to provide a group where it would be possible that some teachers had never experienced mainstreaming.

Measurements

A variety of measurement devices were used in this study. Each of these devices is described briefly below with further elaboration being provided in an appendix. Additional detail will be provided in the report section on Results.

Quality of school life. The Quality of School Life (QSL) is a questionnaire administered to students for the purpose of measuring (1) commitment to school work, (2) attitudes towards teachers, (3) satisfaction with school in general. Detail on the QSL is given in Appendix B. The original version of the QSL developed at Johns-Hopkins University, (Epstein & McPartland, 1976a, 1976b) was revised for use in this study. The major focus of the revision was to alter the questions referring to multiple classes so that they would reference different academic subjects rather than classes. This change was necessary as most students in this study did not have multiple classes with different teachers but rather multiple subjects with a single teacher.

Sociometry. Students in the IWEN classrooms were asked to complete a "group learning survey". This group learning survey simply asked students in the IWEN classes to select three of their classmates for each of four different activities: a class project, a party, a game, and a naming of your three best friends. The "group learning survey" was based on another questionnaire titled Who Do You Like? (Appendix C). The study of social relationships between IWEN's and regular class pupils, more specifically acceptance or liking, in the classroom was the primary purpose of the sociometric task.

Individual educational plans. The instructional program for each IWEN is to be spelled out in a written individualized educational plan (IEP). The general logic underlying this requirement is that of management by objectives (MBO). Contra Costa County has developed an evaluation device for the purpose of appraising IEPs used in special education. Three scores are produced by this evaluation (Appendix D). One score may be termed the MBO-Quantity Score and reports on the total number of means, goals, and other specifications identified in the IEP. Other things being equal, high MBO-Quantity scores suggest that the IEP contains a large number of specific criteria and low scores represent fewer and generally more abstract criteria. A second score generated by the evaluation is what may be termed the MBO-Quality Score. Here high scores represent high quality in the specifications of purpose contained in the IEP and low scores represent poorer quality. The third and final score may be termed MBO-Consistency. High consistency scores represent rater judgments of clear and consistent interrelationships among the array of needs, structure, and other specifications delineated in an IEP.

Low scores would represent ambiguous or conflicting statements within the same plan.

Attitudes towards mainstreaming. A ten-item attitude scale assessing regard for the integration of IWENs into regular classroom instructional programs was constructed for the purpose of this study. Detail regarding the "mainstreaming opinionnaire" is provided in Appendix E.

Needs survey. At the time that the California Master Plan for Special Education was under development and Contra Costa County was initiating new programs for special education, a survey was constructed for administration to various community and educational groups in order to appraise the importance of various special education needs. This special education needs survey (SENS) is described in Appendix F. Scores on the needs survey produce information relevant to the regard and expectations held for community involvement, due process, and a variety of other dimensions especially pertinent to the Master Plan for Special Education.

Design and Procedures

Three major factors were controlled and assessed in this study. First, a factor of type of instructional program was identified with three levels: Individual and Small Group Instruction, Speech and Language Services, and Resource Specialist Services. A second factor was that of student sex with two levels. The third factor was what is termed here "shift" and consists of two levels: individuals whose current placement is more integrated than it was previously and individuals whose current placement is more segregated than it was previously. The basic design is that which Campbell and Stanley (1963) describe as a static group pre-experimental design. This means that comparisons within or among factors are confounded with other variables and that the results are solely descriptive and have no necessary correspondence to a causal relationship between the independent and dependent variables under study.

The three factors identified above were used in an analysis of variance design for appraising the results from this study. The basic design is termed a completely randomized factorial, model 1 or fixed effects, ANOVA (Kirk, 1968) when a single and a variable is being appraised. When multiple dependent variables are appraised, the design would be termed a split plot factorial ANOVA (Kirk, 1968) which is the same design previously described supplemented by a repeated measurement factor.

RESULTS

Quality of School Life

Q.S.L. questionnaires were obtained from the 45 IWENs in the sample. These questionnaires were scored in accord with the key published by Epstein and McPartland (1976). Alpha reliability coefficients were calculated for each of the three subscales of the Q.S.L. using this sample of students. The reliability coefficients obtained were .51 for commitment to class work (COM), .40 for reactions to teachers (TCH), and .73 for general satisfaction or reaction to school (SAT). Considering all 27 dichotomously scored items as a single task, an overall alpha coefficient of .71 was secured for the total Q.S.L. score.

Table 3 reports the results from an unweighted means split-plot factorial analysis of variance, model 1, on the three Q.S.L. subscores (Kirk, 1968). The highly significant result obtained on subscores may be ignored. It means only that the COM and TCH subscores were based on 11 items and the SAT subscore was based on five items. The means from these would be obviously different but the difference would not be meaningful.

A significant program by gender interaction was also obtained. It may be ignored in the presence of the higher order interaction involving both these factors as well as the subscore factor.

The significant interaction among subscores, program and gender has been plotted in Figure 1. Inspection of this figure reveals that the probable source of the significant three way interaction was a comparatively low mean score on attitudes toward teachers from girls enrolled in the speech and language instructional program. It is not known why this result was obtained nor what it may imply. The more usual finding in studies of similar variables is that girls score as high or higher than boys.

A second three way interaction was significant. Figure 2 portrays the results of the interaction among subscores, gender, and shift. It appears relatively clear in this figure that boys whose present placement involves more direct service and less mainstreaming reported a lower commitment to school work than boys whose instructional program had shifted in the opposite direction. This finding implies a relationship between motivation and mainstreaming for boys. Although a cause-effect relationship has not been demonstrated it is consistent with the evidence.

Table 3. Analysis of Variance of the Quality of School Life.

Source of Variance	df	M.S.	F
Programs	2	3.76	.68
Gender	1	8.56	1.55
Shift	1	4.56	.82
P X G	2	20.78	3.78*
P X S	2	3.54	.64
G X S	1	4.56	.83
P X G X S	2	11.94	2.17
Error (Between)	33	5.50	
SubScores	2	238.08	141.56**
SS X P	4	1.41	.84
SS X G	2	2.28	1.35
SS X S	2	.36	.22
SS X P X G	4	4.43	2.64*
SS X P X S	4	1.94	1.15
SS X G X S	2	6.54	3.89*
SS X P X G X S	4	2.43	1.45
Error (Within)	66	1.68	

* = $p < .05$, ** = $p < .01$

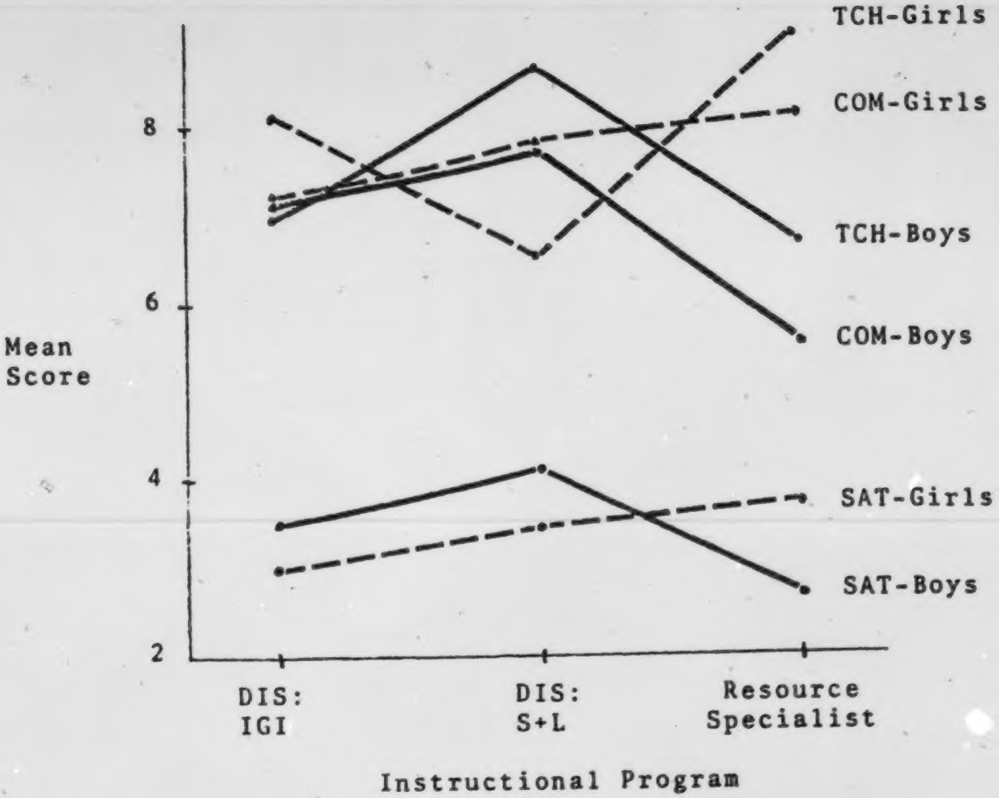

Figure 1. QSL subscale raw score averages by sex and instructional program.

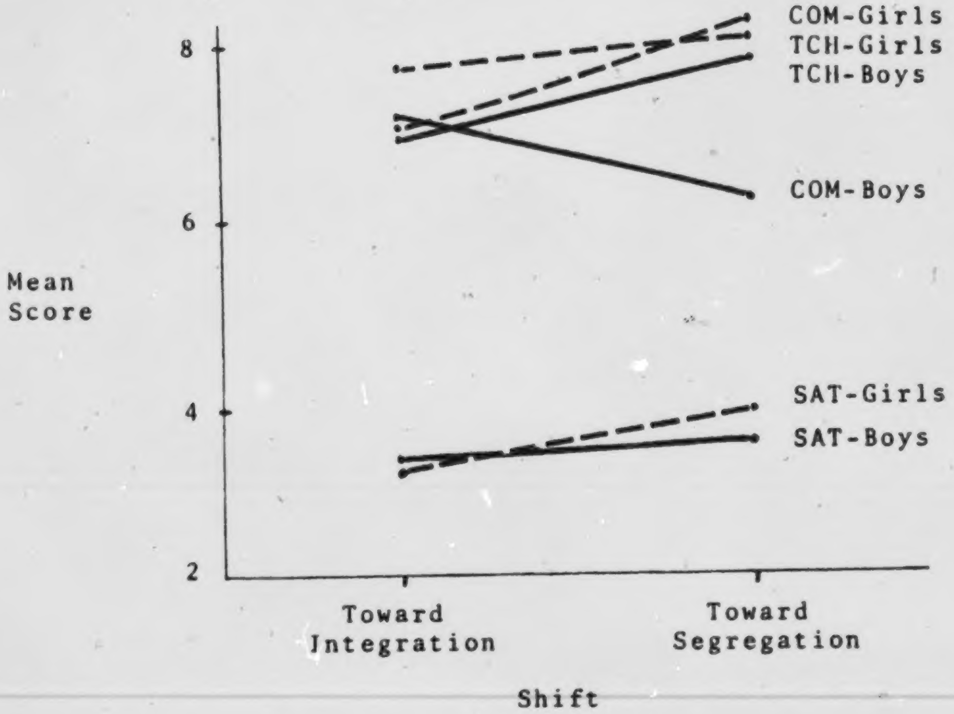

Figure 2. QSL subscale raw score averages by sex and shift to or away from mainstreaming.

The major implication of this finding is that increasing the involvement of boys in mainstreaming may improve their perceptions of at least one aspect of the quality of school life. The fact that other aspects of the quality of school life were unaffected and that a similar result was not found for girls raises many interesting questions meriting further research. The issues are obviously complex, but at the least it appears certain that the establishment of appropriate reinforcing conditions in school life experiences will require a consideration of student sex and of the dimensions of the school experience. This result certainly suggests that studies should be made of relationships among the quality of school life, IWEN classifications, and types of instructional program placements.

Sociometry

The Group Learning Survey, a sociometric instrument, was administered in the 45 regular, fourth grade classrooms containing the IWENs. Each student in the IWEN's classroom was asked to identify his or her three preferred classmates for each of four activities: classroom project, party, team, and best friend. Twelve scores were then determined for each IWEN consisting of the number of times that IWEN was identified by his or her classmates on the nomination forms for each of the 12 possible nominations. Additionally, an overall score was obtained by adding these twelve scores.

The reliability of these measurements was assessed by calculating coefficient alpha for each of the four selection tasks. The selection tasks of classroom projects, party, and team had reliabilities of .60, .58 and .64 respectively. These reliabilities were not as high as might be preferred but possibly all that could be expected given the short length of each subscore. The fourth selection task score, that of naming "your three best friends in this class", was less reliable with an alpha coefficient of .36. Overall the total sociometry score had a reliability coefficient of .81.

Table 4 reports the results of an analysis of variance on the total score from the sociometric measurements. No significant effects were obtained among programs, between student sexes, between shift levels, or among the interactions of these three factors. The total sociometry score is sufficiently reliable for detecting reasonably large differences among groups. The failure to obtain a significant result in this analysis of variance suggests that the factors of program, sex, and shift were unrelated to choice or liking by classmates of these IWENs.

The same data may be used to address another important question: Are IWENs chosen as often as regular pupils for school tasks, friend, etc.? Clearly, regardless of class size, the expected number of nominations for any individual is one for each of the 12 nomination positions or blanks. The IWENs in this sample were chosen an average of .73 times with a standard deviation of .59. This result may be compared with the expected value using the one sample t-test procedure. The results, $t = -3.11$, was quite significant ($p < .001$). Mainstreamed IWENs such as those represented in this study were not selected by their classmates for participation in activities or friendship as often as would be expected.

Table 4. Analysis of Variance of Sociometry Scores

Sv	cf	MS	F
Programs	2	15.99	.30
Gender	1	17.74	.34
Shift	1	6.48	.12
P X G	2	17.20	.33
P X S	2	60.78	1.15
G X S	1	11.50	.22
P X G X S	2	99.79	1.88
Error or Residual	33	39.12	

A sociometric task very similar to the present one had previously (May 1975) been administered to Contra Costa County classes containing mainstreamed IWENs. The previous study reported a mean of .66 and a standard deviation of .88 for 313 mainstreamed IWENs. The same result was obtained on that occasion, with mainstreamed IWENs selected significantly less often than would be expected. The results from these two studies were compared and no significant difference was found (t = .48) suggesting that choice by classmates of mainstreamed IWENs has not changed over three years of special education master plan experience.

An important finding of this facet of the study was a lack of significant differences involving the shift variable. Since one of the primary purposes of mainstreaming is to reduce labeling and negative stereotyping it might be assumed that movement toward more integration should result in greater acceptance of the exceptional by their peers. The fact that this assumption was not verified in the present study suggests that mainstreaming, by itself, is not likely to assist the exceptional to gain greater acceptance by their regular classmates. These findings are consistent with prior sociometric studies reported in the review of the literature.

The fact that differences among the three program types were non-significant was also surprising. It had been assumed that those with the least obvious handicaps would be more accepted by their regular class peers. This expectation was not supported by the results.

This result raises more questions than it answers. One obvious implication is that further research is required and the type of research needed is relatively unambiguous: correlation and cross-sectional designs should be avoided and longitudinal studies of sociometric choice should be conducted so that changes in attractiveness can be related to changes in mainstreaming. Additionally, from a research perspective, it would be highly desirable to introduce experimental assignment of individuals to mainstreaming decisions. Another implication of these findings is more practical. This is that planned, deliberate attempts will need to be made in order to increase the social acceptance of exceptional children by other children; integration alone does not appear to improve social acceptance of the exceptional. An experimental program could be designed to determine what methods are most effective.

Individualized Educational Plans for IWENs

The California Master Plan states that each IWEN shall have his or her educational goals and objectives specified in a written individualized education plan (IEP). The underlying intent appears to be that of management by objectives (MBO) which is a strategy often successful where processes and outcomes can be clearly specified. Does MBO aid teachers and students in the accomplishment of broad educational purposes? Contra Costa County has been working on the development of IEP measurements which may contribute to the answer to that question. These IEP measurements were used to appraise the plans written for the IWENs in this study. A copy of the IEP assessment materials will be found in Appendix D.

Three IEP scores were determined by a trained team of four raters. Each rater read every IEP for the IWENs in this study and appraised 18 attributes. An MBO-Quantity score was constructed by adding the scores for five of these attributes. A MBO-Quality score was the sum of six attributes and an MBO-Consistency score was the sum of five attributes. Two attributes were not used in these subscores.

Every IWEN was required to have an IEP as part of the sample selection criteria but only 29 IEPs were complete enough to allow the raters to judge all 16 items used in constructing the three subscores. The 19 partial data IWENs were excluded from the remaining IEP analysis.

The reliability of each of the three MBO scores was appraised by calculating coefficient alpha for each score with each of the four raters treated as if they were items in a test. The MBO-Quantity ratings analysis generated a coefficient of .98, MBO-Quality a .92, and MBO-Consistency a .75. The first coefficients appear quite high, more so than is usually obtained with measurements such as these. High alpha reliability coefficients result from the simultaneous occurrence of large differences among the scores of different IEPs and small differences among the individual scores produced by the different raters. Both conditions were present for at least the Quantity and Quality ratings.

Separate analyses of variance were conducted for each of the three MBO scores. The large amount of missing data required a change from the basic analysis used elsewhere in this study. It was arbitrarily decided to delete the program factor and assess only gender and shift in a completely randomized factorial design. The results of this analysis are presented in Table 5. It might be noted that this analysis was repeated on the same data with a deletion of gender rather than Program and essentially the same result was obtained.

A significant shift effect was found. IWENs who experienced more mainstreaming this year than previously had a high mean consistency score (3.9 vs. 3.5) than those experiencing less mainstreaming. It may be helpful, for understanding this result, to consider the confounding which is present. IEPs represent differences among writers as well as differences among IWENs. The MBO-Consistency score is highly dependent upon the former and it seems likely that the significant shift effect may have been detecting writer differences. On the other hand, the planning task may have been simpler for IWENs doing well enough to warrant increased mainstreaming. Their needs and objectives may be more consonant with each other and are also more likely to correspond with the teaching approaches found in regular classrooms. More research is needed for even a primitive understanding of the utility of MBO approaches. Important and essentially unanswered questions may be:

1. What are the purposes of an IEP?
2. If the purposes of an IEP include accountability, are there better ways to accomplish the goal?
3. Are IEP's constructed by different writers in the same way? If not, what is the meaning of the difference?
4. Is special education enhanced by MBO under all circumstances? Under any circumstance?

Table 5. Individual Educational Plan Appraisal Analyses of Variance Summary

Dependent Variable	S.V.	df	MS	F
MBO-Quantity				
	Gender	1	.41	.30
	Shift	1	1.98	1.46
	G X S	1	2.04	1.50
	Residual	25	1.36	
MBO-Quality				
	Gender	1	.35	1.58
	Shift	1	.20	.89
	G X S	1	.27	1.22
	Residual	25	.22	
MBO-Consistency				
	Gender	1	.03	.17
	Shift	1	1.08	6.42*
	G X S	1	.00	.01
	Residual	25	.17	

$^*p < .05$

Attitudes Toward Mainstreaming

The regard for mainstreaming held by the teachers and parents of IWENs is a variable of substantial import. It could be argued that such attitudes are significant determinants of both the existence and rate of mainstreaming implementation. Good attitude scales which assess such a regard have not been available until the recent work of Gottlieb and Corman (1975), among others, was published. The question of attitudes toward mainstreaming was assessed in this study by administering a 10-item opinionnaire to both the parents and the teachers of the IWENs in this study. The opinionnaire scores obtained were analyzed using an unweighted means, split-plot factorial analysis of variance, fixed effects procedure (Kirk, 1968). The results from this analysis are presented in Table 6.

The reliability of the opinionnaire was determined by use of an alpha procedure. A value of .82 was obtained for the total opinionnaire score.

No significant between subjects effect was obtained in the ANOVA analysis and it was concluded that attitudes toward mainstreaming, overall, were independent of parent-teacher status, type of instructional program placement, student sex, and recent shifts in the amount of mainstreaming. Two significant item differences were found in this analysis. First, a significant item effect was obtained but this result is not meaningful. It indicates only that there were differences in the "difficulty" indices associated with each of the ten attitude scale items.

Table 6. Analysis of Variance of Attitude Toward Mainstreaming Items

SV	df	M.S.	F
Raters	1	1.28	.31
Programs	2	9.83	2.35
Gender	1	.13	.03
Shift	1	4.61	1.10
R X P	2	7.53	1.80
R X G	1	3.18	.76
R X S	1	5.43	1.30
P X G	2	3.56	.85
P X S	2	6.98	1.67
G X S	1	.50	.12
R X P X G	2	2.86	.68
R X P X S	2	11.34	2.72
R X G X S	1	11.10	2.66
P X G X S	2	1.14	.27
R X P X G X S	2	1.04	.25
Error (Between)	65	4.17	
Items	9	9.92	13.42**
R X I	9	3.24	4.38**
P X I	18	.71	.97
G X I	9	.51	.69
S X I	9	.34	.45
R X P X I	18	.53	.72

Table 6 (ContinuedP

R X G X I	9	1.00	1.35
R X S X I	9	.54	.73
P X G X I	18	.80	1.08
P X S X I	18	.68	.92
G X S X I	9	.45	.61
R X P X G X I	18	.46	.63
R X P X S X I	18	.70	.94
R X G X S X I	9	1.15	1.55
P X G X S X I	18	.73	.99
R X P X G X S X I	18	.56	.75
Error (Within)	585	.74	

** = $p < .01$

The second significant effect was an interaction between the items and the rater (parents vs. teachers) factors. That interaction is plotted in Figure 3, where scores for item numbers 2, 3, 6, 9, and 10 have been reversed from the scores obtained in the opinionnaire in order to make the meaning of a score similar for all items. Low scores in Figure 3 represent attitudes more favorable toward mainstreaming. The largest differences between teachers and parents appear in Items 1 and 9 and the parent-teacher differences are reversed for the two items. Parents, more often than teachers, agreed that "the special class is the best way of educating the exceptional child". Teachers, more often than paents, disagreed with the statement that "the transfer of exceptional children to regular classes creates no major problems other than the needs for resource specialists." These two results can be seen as consistent with each other if one considers regard for mainstreaming to be somewhat more complex than that implifed by a single overall continuum. The difference between parents and teachers on the issue of how best to educate children with special needs is straightforward: parents prefer special classes. The apparent reversal of opinion represented by the results of item 9 may be explainable by the fact that mainstreaming a child is much more of a problem for the regular class teacher receiving the child than it is for the parent who experiences no fundamental change in relation to the child. The parent therefore is more "favorable" to mainstreaming than the teacher on this item.

Elementary School Teacher Conceptions of Special Education Needs

In Spring 1974 the Contra Costa County RLA conducted a special education needs survey as a part of its development of a comprehensive plan. The survey solicited the opinions of a

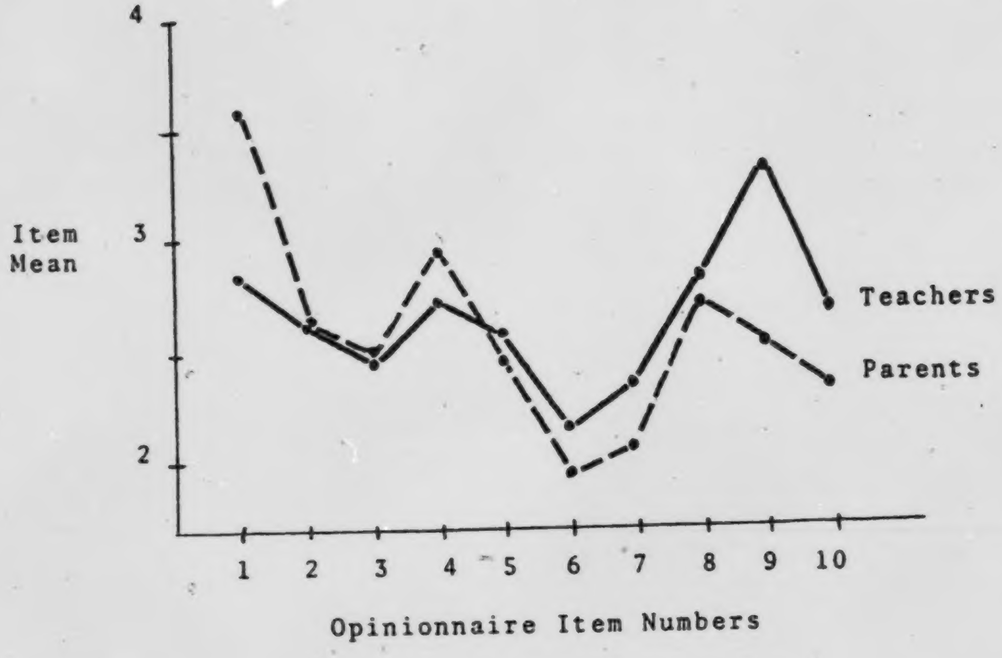

Figure 3. Attitude item average scores for teachers and parents of integrated IWENs.

large number of individuals representing a variety of lay and educational groups associated with special education. A copy of the survey and results of the 1974 administration are included in Appendix F.

The same needs survey was readministered to a sample of teachers associated with the IWENs in this study. The needs study questionnaire items are directly pertinent to components of special education which are included in the California Master Plan for Special Education. Consequently, the responses of the elementary teachers in this sample to these items were evaluated item by item with the objective of detecting changes from the 1974 perceptions of elementary school teachers and by relating these perceptions to the independent variables in this study.

Successive completely randomized factorial analyses of variance were conducted on each of the 25 questions contained in the needs study. It should also be noted that each of these questions was addressed in terms of its importance under both an "IS" now and a "SHOULD BE" mode of responding. The results of these analyses are presented in Table 7.

One concern of such a repeated testing analysis is that of controlling alpha or type 1 error rates. Under the circumstance that 350 statistical tests have been conducted it would be expected that 17.5 of these tests would be significant by chance alone if the tests were conducted at the alpha = .05 level. The results shown in Table 7 reveal that 31 of the tests were significant at or beyond the .05 level. Apparently,

Table 7. Summary of Needs Survey Analyses of Variance Outcomes

Item Number	IS ANOVA							SHOULD BE ANOVA						
	P	G	S	PG	PS	GS	PGS	P	G	S	PG	PS	GS	PGS
1			**											
2			*											**
3														
4							**							*
5	*						*							
6							***		*					*
7							*							
8														
9								**				**	**	
10					*					*				
11					*					*				
12					*									
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21								*						
22		*			*									
23											**	*		*
24														**
25								*					*	*

Note: * = p < .05, ** = p < .01, *** = p < .001

the majority of the statistical tests conducted and found significant were significant by virtue of chance alone. The probability that an overall error rate for the family of comparisons can be protected at the .05 level was established by requiring a significant level of alpha = .00015 for all tests. This strategy revealed that the responses to two different questions were more discrepant than would be expected at the .05 level of significance for the family of comparisons.

One of the significant differences occurred in the rating of "IS" importance for the question "to provide parents an opportunity for a fair and unbiased appeal regarding disagreements about individual placements in special education programs". There, it was found that teachers in the schools with IWENs in the Resource Specialist Program rated this concept as less important than did those teachers in schools with IWENs in the combined individual and group instruction and the speech and language programs. This difference, although statistically significant, does not appear especially meaningful for either planning or interpretation of the results from this study.

Another significant difference was found in the perception of "IS" importance of the special education objective "to make as early an identification as possible of those children who will require a program of special education." Here, a significant program by gender by shift interaction was obtained. That interaction is plotted in Figure 4. Apparently, the importance of early identification was essentially unrelated to sex and shift except for those served by the designated instructional service program of individual and small group

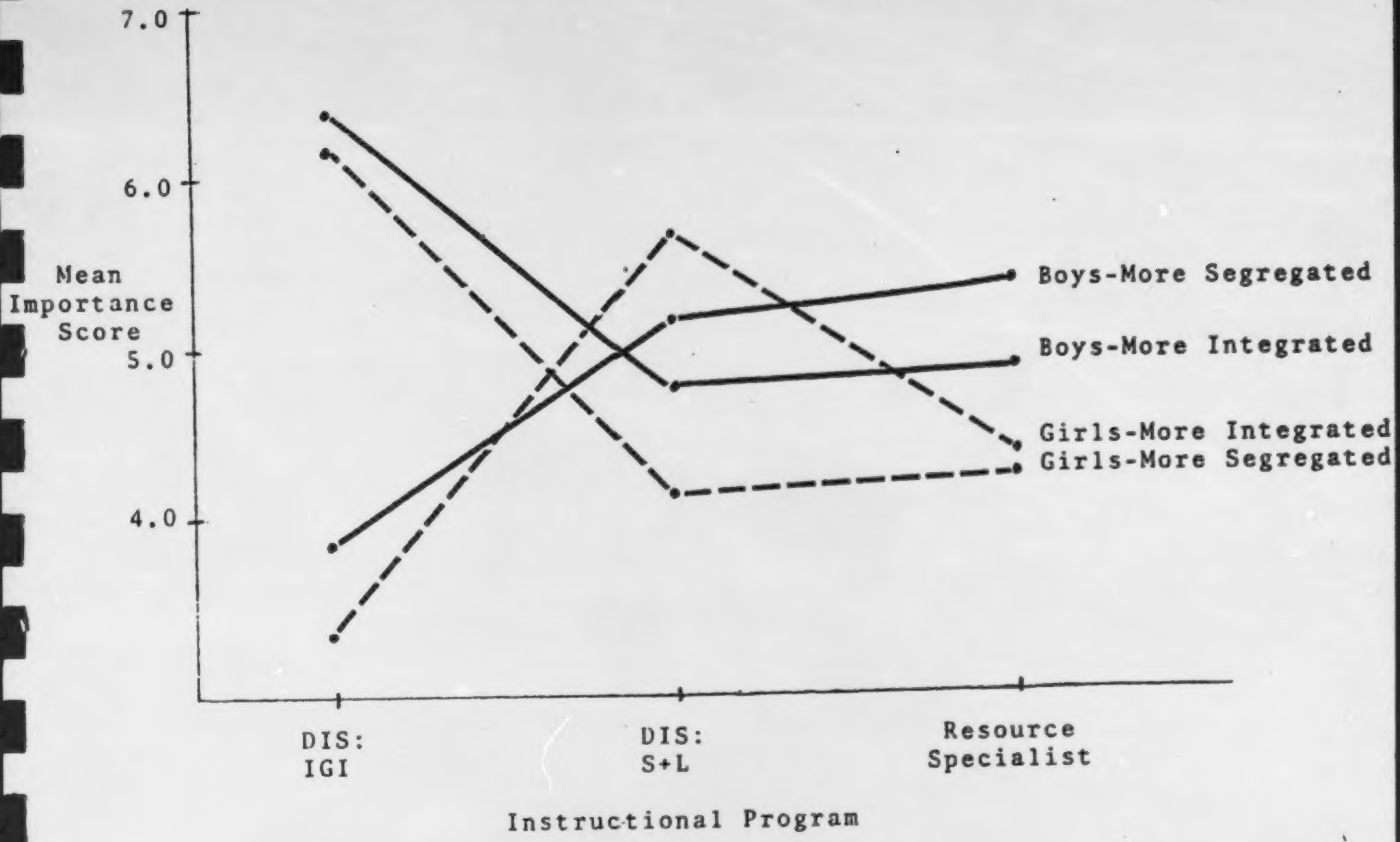

Figure 4. Is Importance averages by Program, Gender, and Shift for "needs" statement of "as early an identification as possible."

instruction. There early identification was seen as especially important for boys experiencing more mainstreaming and for girls experiencing less mainstreaming. Perhaps this sex and shift interaction suggests a social desirability factor may be pertinent but then why was it not found for all programs? This finding again appears to lack meaning with respect to an understanding of the independent variables under study. Overall, the authors do not regard the results from this phase of the needs study as providing insight into an understanding of the independent variables, nor suggesting any planned revisions nor stimulating further research.

The comparison of the results of the present replication of needs study with the results of the earlier one did provide some meaningful results. Table 8 relates the elementary teacher perception of special education teacher needs obtained in this study to the perceptions of a similar group who responded to the needs study in 1974 as the California Special Education Master Plan was being initiated in the Contra Costa County RLA. Table 8 reports the 99.988 percent confidence interval for the importance ratings obtained in this study and the means or averages obtained in 1974 from a random sample of Contra Costa County elementary school teachers.[1] A very large number of significant differences were found and, for the most part, these significant differences occurred in the perceptions of "IS" important. The 1974 means which have been marked with a B in Table 8 represent

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[1] The unusual sized confidence interval was established in order to obtain an overall alpha = .05 protection level for the entire family of comparisons.

Table 8 . Elementary Teacher Perceptions of Special Education Needs in 1974 and 1978.

Topic	Question Number	IS			SHOULD BE		
		1974	1978 Conf Int.		1974	1978 Conf Int.	
		Mean	Lower Bound	Upper Bound	Mean	Lower Bound	Upper Bound
Comm. Involve	1	3.2[B]	4.29	5.34	5.3	4.92	5.81
Due Process	2	4.4[B]	4.88	5.88	5.3	4.92	5.86
Class System	3	3.7[B]	4.12	5.49	4.7	3.73	5.02
Ident Assess	4	4.5[B]	5.06	6.09	6.7	6.38	6.79
& Planning	5	4.2[B]	4.93	5.85	6.3	5.66	6.38
Management &	6	4.2[B]	4.30	5.47	6.7	6.52	6.88
Support	7	4.1[B]	4.40	5.34	6.1	5.49	6.23
Transportation	8	4.6	3.94	5.41	5.0	4.25	5.63
Capital Outlay	9	3.7	3.64	4.97	5.3	4.53	5.76
Spec Classes	10	4.3[B]	4.55	5.61	5.7	5.05	5.96
Resource Spec	11	4.6[B]	4.92	5.98	6.0	5.45	6.36
	12	3.8[B]	3.99	5.25	6.2	5.87	6.72
	13	3.2[B]	3.39	4.65	6.3	5.44	6.52
	14	3.5[B]	3.73	4.91	6.0	5.35	6.25
	15	3.3[B]	4.39	5.59	6.2	5.94	6.72
Desig. Services	16	3.9[B]	4.15	5.46	5.9	5.67	6.51
Non public schls	17	1.9[B]	2.18	3.56	4.2	3.59	5.13
State Resid Schls	18	3.5	3.35	4.78	5.6	5.50	6.45
Eval & Info	19	3.7[B]	3.97	5.09	5.8	4.78	5.88
Systems	20	4.0[B]	4.21	5.41	4.6	3.71	4.87
Finance	21	3.8[B]	3.81	5.00	6.1[A]	4.71	5.94
Personnel	22	2.9	2.42	3.75	5.2[A]	3.64	5.06
Educ & Environ	23	2.5[B]	2.58	3.88	5.9	5.13	6.09
	24	2.4	2.02	3.10	5.2[A]	3.94	5.04
	25	2.2	1.99	3.14	5.3	4.13	5.37

A 1974 mean below 1978 confidence interval
B 1974 mean above 1978 confidence interval

items which reflected perception of less import for master planning concepts in 1974 than in 1978. These results should be considered simultaneously with an inspection of the wording of the special education objectives reproduced in Appendix F containing the needs survey.

In general these results indicate that elementary teachers today view special education master planning concepts as more important now that they have had experience with the program. There were some exceptions to this. Needs regarding transportation, capital outlay, state residential schools, personnel, and some aspects of community education/information programs were rated as no different in importance now than they were previously. This is not surprising as most of the latter concepts may be seen either as less direct in their educational impact or as having been alleviated by the enhanced level of service and funding associated with implementation of the special education master plan. What stands out as the primary finding is the increased importance perceived for the major program elements addressed in state and federal legislation. The increased concern for community involvement, due process, classification system, etc., suggests that teachers, after experience with new special education programs, accept the legal requirements as sound. The reader is strongly encouraged to examine the original item wordings and consider seriously the perceptions of these individuals who are so deeply and directly involved in the delivery of education to all students.

The "SHOULD BE" importance ratings were also of substantial interest. Many fewer significant differences were found suggesting that the teachers' perceptions as to what was desirable had, for the most part, remained unchanged during this four years of experience. Some changes, however, were found and these changes were uniformly in the direction of being perceived as less important now than they had been previously. The financing of special education through additional state support was seen as less important and this might well be due to the amelioration of that need by the enhanced level of state funding which has been experienced. Similarly, the professional development of teachers in the area of special education was no longer seen as being as high in "SHOULD BE" importance and this might well be attributed to a reduction in teacher anxiety about mainstreaming stemming both from increased experience and in-service training which has been provided. A third change was found in teacher views of the importance of providing educational programs to the community at large regarding the needs of exceptional individuals. It may well be that this need has also been ameliorated by operations improved through California's Master Plan for Special Education. In regard to this latter issue, it should be noted that a significant contribution may have been made by the efforts of the Search and Serve team operating out of the California State Department of Education. That team has generated a large amount of publicity which would be expected to improve attitudes and increase awareness of special education programs.

Overall, the evidence cited in this section of the report strongly suggests that elementary school teachers in Contra Costa County have a new regard for special education services. The changes that have transpired are, overall, supportive of a greater teacher regard for concepts integral in California's Master Plan for Special Education.

DISCUSSION

The fundamental purpose of this study was to assess the extent of certain important differences between children who were identified as IWEN's but w-o differed in the proportional amount of mainstreaming they had been receiving. A review of the literature indicated that one problem with prior research was that only rough measures of the amount of integration had been used and it was seen as necessary and desirable to use a measure of integration which was both objective and practical. For this purpose the specific minutes of integration time reported by school districts in accordance with California State Department of Education requirements was used. In addition, children were classified as either moving toward more integration or away from integration, based on comparison of their amounts of segregated instruction time.

It was anticipated that type of placement might also be a variable which affected the characteristics under study therefore three different types of placement were utilized. Finally, since the literature has continually indicated differences between males and females on a variety of variables related to special education this too was used as a criterion for sample selection.

It was also the intent of the present study, using the criteria specified above, to study changes which had occurred in a specific RLA over a period of several years. For this purpose the study utilized the teachers, parents and classrooms of the children defined by the criteria specified above.

The dependent variables selected for study were 1) the reactions of the exceptional child sample to their educational experience, 2) the acceptance of special education children by regular children, 3) differences in several aspects of the IEP among sample subgroups, 4) the reactions of teachers and parents to the differing educational experiences and placements of the sample groups, 5) and teacher perceptions of differences in special education needs both with respect to the current sample population and in comparison with teacher perceptions of special education needs as assessed in the same RLA four years earlier.

As with any attempts at in vivo research certain circumstances existed which made the conduct of the study less than ideal. An initial problem related to the sample. There were considerably fewer children in some categories than had been originally anticipated. Since the initial plan was to conduct an equal N analysis this resulted in a limit on the size of the overall sample; the number of subjects in any cell was limited by the number of subjects (4) available for the smallest cell. Furthermore, not all subjects selected randomly for the sample were utlimately available for use. Normal kinds of attrition had occurred through moving or exiting special education programs. In other cases the teachers of children selected for the sample refused to participate. The combined total attrition was 12 students. Where possible replacements were selected randomly from among the remaining student pool for each cell but, unfortunately, students were lost from two cells where additional replacements were unavailable.

Another variable that limits the interpretation which can be applied to the present study is that the differences between groups on the amount of time spent in integrated/segregated educational settings was not as great as anticipated.

It had been anticipated that the inclusion of the DIS (Speech and Language) group would be tantamount to including a control group. Analysis of the data did not confirm this anticipation and differences among the three program type groups did not occur. This was not a serious problem with the sociometric instrument, where it was possible to utilize an estimate of the number of expected selections regardless of program type. It was a problem, however, on the Q.S.L. where failure to find significant differences among program types, coupled with lack of information on how the regular children would have responded to the Q.S.L., left little basis for interpretation. Had it been possible to pursue the original intention of utilizing the Q.S.L. as developed by Epstein and McPartland, such a normative reference would have been tenable but insistence by participating teachers on changes in the instrument foreclosed this possibility.

The major significant finding on the Q.S.L. was that boys who had experienced a shift toward more mainstreaming were higher in their commitment to school or, alternatively, that boys shifting away from mainstreaming were lower. This result suggests the possibility that "motivation" of male exceptional children might be increased by moving them toward mainstreaming. Should such a strategy be exercised, it would be wise to study whether there was a corresponding increase in actual school achievement as well as in expressed intent.

The failure to find other differences through use of the Q.S.L. suggests that type of program, amount of mainstreaming, and sex of the students, by themselves, had little effect on these children's perceptions of their educational experience.

In some respects the results obtained from the sociometric instrument parallel the findings obtained with the Q.S.L. There were no sociometric differences due to type of program, amount of mainstreaming or sex of the student and no interactions among these three variables. When viewed from the point of view of the expected number of choices, analysis indicated that IWEN's were chosen less often than would be expected. This finding is consistent with the finding of nearly every sociometric study reported in the literature review which indicated that exceptional children, regardless of type or amount of integration, tend to be chosen less by their regular class peers. The fact that the present results were found to be highly consistent with the results obtained on an elementary school population in the same RLA in 1975 suggests that integration and the removal of labels, by themselves, do not guarantee the social acceptance of the exceptional. If special education is to attain one of the major goals specified in the Master Plan for Special Education then special steps must be taken to assist teachers, parents and others to actively promote the acceptance of the individual.

Study of the IEPs was considerably hampered by the fact that only 29 of the 48 children included in the original sample had complete IEPs. This finding, in and of itself is probably worthwhile. It suggests that the IEPs may be viewed by teachers, resource specialists and administrators and others as more of a bureaucratic hurdle than as a useful educational technique. Attention needs to be given to the views of professional educators on the IEP, its utility, and what might be done to increase its usefulness. Those who participate in the process of educational planning for the exceptional may need to be provided with additional training in the development and use of practical IEPs.

The only significant statistical finding which emerged from the analysis of IEP data was that higher consistency scores were found among the IEPs of those children who were experiencing more mainstreaming. At least two explanations are possible. One is that writing IEPs for children who are moving toward additional integration may be more straightforward due to the fact that they are improving, that their educational needs are more agreed upon by plan writers, that their needs are more like the needs of children with whom education personnel are most experienced, or a combination of these factors. The second general possible explanation is that the difference reflects a difference in IEP writers. Regardless of which of these explanations, or combination of explanations is the case, it appears that additional attention should be given both to training IEP writers to the needs of IEP users. The task could possibly be simplified and the results improved if additional attention were given to the format and required content of IEP. Results obtained here do seem to raise questions about the structure and utility of IEPs.

Results of the mainstreaming opinionnaire administered to parents and teachers indicates that their attitudes were not effected by the type of program in which a child was placed, the sex of a child, or by children's shifts toward or away from mainstreaming. The main differences found were between teachers and parents and were specific to items. Parents appeared to favor a more segregated approach to the provision of educational services to the exceptional than did the teachers. This somewhat surprising result suggests that parents may not fully understand or accept the current thrust of the California Master Plan. Since parent pressures have been, in the past, a primary determinant of the direction taken by special education, it would appear wise to investigate further parental attitudes toward integration/ segregation of exceptional children. As might be expected teachers, although more accepting than parents of a mainstreaming approach, see more problems in placing an exceptional child in a regular class than do the parents. This is perhaps only natural since it is the teacher, rather than the parent, who must deal with the child placed in that situation.

The most significant findings which stem from the Special Education Needs Survey result from a comparison of the present administration with the 1974 administration. The fundamental differences appear to reflect changed views on the part of teachers with respect to what "IS" important in special education. After four years of exposure most Master Plan concepts which are not seen as more important than they were in 1974 are either those which have a less direct educational impact or those which have been dealt with through the increased support provided under Master Plans. It appears that exposure to the implementation of Master Plan ideas has convinced regular class teachers of their importance. Many fewer differences between 1974 and 1978 emerged on the "SHOULD BE' section of the Needs Survey. Those changes which did occur were all in the direction of less important. The areas in which these shifts occurred suggest that implementation of the master plan in this RLA created this shift in perceptions since increased State support, professional development and community awareness were all viewed as having less importance now than previously. It is clear that increased State support has been forthcoming and an extensive program of professional development has been carried out in the RLA. The community awareness aspect may well have been diminished in importance not only through local efforts but also through the efforts of the state directed Search and Serve program.

In sum, no meaningful differences were found which were attributable to shifts toward or away from mainstreaming. This may be due to the need for larger differences on this variable. Further research with more pronounced differences could give different results.

While the study of groups manifesting more extreme differences both in amount of integration and program type would be worthwhile this study indicates that within a general population of mainstreamed children on the variables studied there are few differences attributable to program types or shifts in mainstreaming. Major differences appear to be associated with exceptionality itself, even though labels are not applied and integration is maximized. The hope that integration, by itself, will eradicate such differences is not substantiated by present findings.

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APPENDIX A

CONTRA COSTA COUNTY 1976-77 INTEGRATION REPORTS FOR COMMUNICATIVELY HANDICAPPED AND LEARNING HANDICAPPED STUDENTS

Calif. State Dept. of Education
Office of Special Education
721 Capitol Mall, Sacramento, CA
CPSE-1 (Rev. 7-76) Form E-4-LH

INTEGRATION - LEARNING HANDICAPPED

Name of RLA Contra Costa County

Date of information June 10, 1977

4. Estimated average time in minutes daily per pupil.

INSTRUCTIONAL SETTING	AGE	NUMBER OF PUPILS INTEGRATED	TIME WITH REGULAR PUPILS				AVERAGE TOTAL TIME INTEGRATED	AVERAGE TOTAL SCHOOL TIME
			Transportation	Nutrition	Recreation	Instruction		
1. Pupils Enrolled in Special Classes and Centers or Receiving Home and Hospital Instruction	0-2							
	3-4							
	5-17	51		36	25	91	167	320
	18-21	4		32		98	130	370
2. Pupils Enrolled in Special Classes and Centers or Receiving Home and Hospital Instruction; and Receiving Speech Therapy, Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4	3						170
	5-17	123		21	20	116	175	340
	18-21	8		22		105	127	327
3. Pupils Enrolled in Regular Classes and Receiving Special Education Services Including Learning Disability Group, Physically Handicapped, and/or Educable Mentally Retarded Services	0-2							
	3-4							
	5-17	413		41	15	254	310	355
	18-21	23		50		244	294	341
4. Pupils Enrolled in Regular Classes and Receiving Learning Disability Group, Physically Handicapped, and/or Educable Mentally Retarded Services; and Receiving Speech Therapy, Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4							
	5-17	672		17	33	220	270	325
	18-21	29		12		253	265	355
5. Pupils Enrolled in Regular Classes and Receiving Speech Therapy and Part-Time Remedial Instruction Including Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4	1						
	5-17	267		23	33	225	281	301
	18-21	33		27		283	310	357
6. Pupils Enrolled in Nonpublic School Special Education Services	0-2							
	3-4							
	5-17							
	18-21							
7. Pupils Enrolled in Nonpublic School Special Education Services and Receiving Speech Therapy, Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4							
	5-17							
	18-21							
8. TOTALS OF KNOWN AND SERVED	0-2							
	3-4	4						128
	5-17	1526		26	27	217	270	330
	18-21	97		28		243	271	351

Calif. State Dept. of Education
Office of Special Education
721 Capitol Mall, Sacramento, CA
CPSE-1 (Rev. 7-76) Form E-4-CH

INTEGRATION - COMMUNICATIVELY HANDICAPPED

Name of RLA Contra Costa County

Date of information June 10, 1977

4. Estimated average time in minutes daily per pupil.

INSTRUCTIONAL SETTING	AGE	NUMBER OF PUPILS INTEGRATED	TIME WITH REGULAR PUPILS				AVERAGE TOTAL TIME INTEGRATED	AVERAGE TOTAL SCHOOL TIME
			Transportation	Nutrition	Recreation	Instruction		
1. Pupils Enrolled in Special Classes and Centers or Receiving Home and Hospital Instruction	0-2							
	3-4	2						
	5-17	20		7	5	65	77	208
	18-21	3		11	9	78	98	124
2. Pupils Enrolled in Special Classes and Centers or Receiving Home and Hospital Instruction; and Receiving Speech Therapy, Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4	1						
	5-17	23		9	3	59	71	209
	18-21	2						340
3. Pupils Enrolled in Regular Classes and Receiving Special Education Services Including Learning Disability Group, Physically Handicapped, and/or Educable Mentally Retarded Services	0-2							
	3-4							
	5-17	307		41	23	243	307	340
	18-21							
4. Pupils Enrolled in Regular Classes and Receiving Learning Disability Group, Physically Handicapped, and/or Educable Mentally Retarded Services; and Receiving Speech Therapy, Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4							
	5-17	57		32	29	230	291	345
	18-21	3		50		197	247	342
5. Pupils Enrolled in Regular Classes and Receiving Speech Therapy and Part-Time Remedial Instruction Including Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4	3						
	5-17	314		41	24	257	322	335
	18-21	29		50		240	290	337
6. Pupils Enrolled in Nonpublic School Special Education Services	0-2							
	3-4							
	5-17							
	18-21							
7. Pupils Enrolled in Nonpublic School Special Education Services and Receiving Speech Therapy, Remedial Physical Education, Driver Training, and/or Special Blind Allowance	0-2							
	3-4							
	5-17							
	18-21							
8. TOTALS OF KNOWN AND SERVED	0-2							
	3-4	6						
	5-17	721		38	23	237	298	330
	18-21	37		44	0	210	254	320

Appendix B

QSL (QUALITY OF SCHOOL LIFE) QUESTIONNAIRE

QSL is a copyrighted questionnaire designed to measure three dimensions of student reactions to school: (1) satisfaction with school in general, (2) commitment to school work, and (3) attitudes toward teachers. Reproduction of this scale without the consent of the Johns Hopkins University Center for Social Organization of Schools is prohibited.

Description. The QSL is composed of 14 true-false items and 13 multiple choice items. The QSL authors first developed the scale in a study of over 4000 students enrolled in grades 4,5,6,8, and 11 in all public schools of one county in Maryland. Additional development occurred in a follow-up study one year later when the same student bodies were readministered a revised QSL.

The QSL authors conducted two analyses to assess whether a single overall measure or separate measures would be required in appraising the quality of school life. One analysis assessed differences in relationships between each of the three subscales and pertinent external measures. The other analysis used the conventional statistical procedure of factor analysis. Both analyses supported the multidimensional nature of the QSL.

Scoring. A scoring key is published and available from the QSL scale authors. The Satisfaction with School subscale score ranges from 0 to 5. The Commitment to Schoolwork and Attitude Toward Teachers subscale scores each range from 0 to 11. The total QSL scale score is the sum of the three subscale scores.

Reliability. Numerous reliability coefficients have been reported. Among these: KR20 reliabilities were .81, .72, and .64 for satisfaction, commitment and attitudes subscales respectively in the elementary grades. Similarly, at the secondary level, KR20 coefficients were .79, .80 and .73. The total scale reliability (KR20) was .86 or higher in each grade level studied.

Test-retest reliability coefficients were reported as correlations between QSL scores obtained across a one-year interval for those students taking the scale on both occasions. The results, in the same order as above, were: .49, .37, and .17 at the elementary level and .47, .42, and .36 at the secondary levels. It should be noted that these test-retest correlations may be viewed as equally pertinent to both reliability and validity. This is so because the true scores of the measurements would be expected to change over a one year period - most for attitudes toward teachers at the elementary level, least for satisfaction with school at those grade levels where the participant is likely to be at the same campus on both occasions.

Validity. The QSL authors report 24 significant correlation coefficients showing that "In general, students who report high satisfaction with the quality of their school experiences are those who are comfortable with the demands (regulations for behavior) and opportunities (participation) of the school setting, are industrious and ambitious, have more positive self-evaluations, and receive positive evaluative messages from teachers and parents." Low correlations were reported between QSL scores and socio-economic status (r = .10), race (r = .02) and sex (r = -.03).

Administration. The QSL was constructed for group administrations such as those used with paper and pencil classroom tests. The format is compatible with either self-administration or interview procedures, however these administration methods have not been studied with this instrument. A complete copy of the Q.S.L. Questionnaire is attached.

Reference: Epstein, J. L. & McPartland, J. N. The concept and measurement of the quality of school life. American Educational Research Journal, 1976, 13, 15-30.

INSTRUCTIONS FOR QUALITY OF SCHOOL LIFE (QSL) SURVEY

Teacher,

1) Please administer the QSL only to the identified student(s) in your class. Be careful to give each coded QSL to the child whose name appears on the note stapled to the QSL survey. (If the note has come unattached, call Sandie Barner at 944-3403 and she can translate the code for you.) After giving the survey to the child, remove the attached name. A teacher, resource specialist, or aide must be present to answer any of the student's questions while he/she is taking the survey. (The student(s) may need to have the teacher, resource specialist, or aide read the items on the survey to him/her.)

2) The test administer should tell the child that his/her responses will not be looked at by anyone (including their teacher) at the school, and that they need not put their names on the survey. Read the first page (introduction) to the student(s).
The teacher should not look at how the child answers. All answers should be maintained as confidential.

3) Helpful Hints: The student(s) may want to talk abouy questions 1-14. Try to make sure they understand the questions, but keep interpretations simple and related to the particular question. Sometimes all that is required is a rereading of the question. Question 9 may need to be explained. The adjectives describing the relationship may be confusing and need clarifying.
The remainder of the questions, I hope, should not be difficult for the student.

4) Allow the students to place their responses in a manila envelope and seal it. You, as the regular 4th grade teacher, must retain the answer sheets.

QSL

The Quality of School Life

To The Students:

The questions in this booklet will help you and others who seek to improve schools to understand how you feel about school and things that happen in school.

Read each question. Then think carefully and mark one answer that is closest to what is true for you. Remember! This is not a test. There are no right or wrong answers. Please work on your own. It is important to answer what YOU really think.

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Circle Ⓣ or Ⓕ if the following statements are TRUE or FALSE for you.

1. T F In class, I often count the minutes till it ends.
2. T F I wish I could have the same teachers next year.
3. T F Most of the time I do not want to go to school.
4. T F Most of the teachers want me to do things their way and not my own way.
5. T F We hardly ever do anything very exciting in class.
6. T F The teachers in this school often act as if they are always right and you were wrong.
7. T F I am very happy when I am in school.
8. T F Most of my teachers really listen to what students have to say.
9. T F I daydream a lot in class.
10. T F Certain students in my class are favored by the teacher more than the rest.
11. T F I like school very much.
12. T F Teachers here have a way with students that makes us like them.
13. T F Most of the topics we study in class can't end soon enough to suit me.
14. T F Most of my teachers do not like us to ask a lot of questions during a lesson.

Check one (✓) answer that tells best what YOU think.

15. This term I am eager to get to . . .

______ 1. all my subjects.
______ 2. most of my subjects.
______ 3. about half my subjects.
______ 4. one or two subjects.
______ 5. none of my subjects.

16. How would you rate the ability of your teachers? My teachers are . . .

______ 1. far above average.
______ 2. above average.
______ 3. average.
______ 4. below average.
______ 5. far below average.

17. In my class I get so interested in an assignment or project that I don't want to stop work.

______ 1. Never.
______ 2. Hardly ever.
______ 3. Quite often.
______ 4. Every day.

Check one (✓) answer that tells best what YOU think.

18. Thinking of my teachers this term . . .

______ 1. I really like them.
______ 2. they are OK.
______ 3. I don't like them.

19. The school and I are like . . .

______ 1. good friends.
______ 2. friends.
______ 3. distant relatives.
______ 4. strangers.
______ 5. enemies.

20. The work I do in my class is . . .

______ 1. not at all important to me.
______ 2. not too important to me.
______ 3. pretty important to me.
______ 4. very important to me.

21. This term my teachers and I understand one another . . .

______ 1. all the time.
______ 2. most of the time.
______ 3. only some times.
______ 4. none of the time.

22. The things I get to work on most of the day are . . .

______ 1. great stuff--really interesting to me.
______ 2. good stuff--pretty interesting to me.
______ 3. OK--school work is school work.
______ 4. dull stuff--not very interesting to me.
______ 5. trash--a total loss for me.

23. If you could choose to take any subjects at all, how many of your present subjects would you take?

______ 1. All
______ 2. More than half
______ 3. About half
______ 4. Fewer than half
______ 5. None

Read each statement. Then check (✓) Always, Often, Sometimes, Seldom or Never to tell how often the statement is true for YOU.

	Always	Often	Sometimes	Seldom	Never
24. I enjoy the work I do in class.	_____	_____	_____	_____	_____
25. Work in class is just busy work and a waste of time.	_____	_____	_____	_____	_____
26. I feel I can go to my teacher with the things that are on my mind.	_____	_____	_____	_____	_____
27. School work is dull and boring for me.	_____	_____	_____	_____	_____

Appendix C

Who Do You Like?

"Who Do You Like" is a sociometric questionnaire asking a student to choose and identify three of his or her classmates for (1) an academic task, (2) a party, (3) a playground activity and (4) best friends.

Description. The "Who Do You Like" form is a single page describing the respondents' task and listing the for areas of choice with three separate lines for names under each area. A copy of this form is attached.

Scoring. Each class member receives thirteen scores, all of them simple frequency counts. These scores are (1) Total number of students completing the form in the class, (2) Number of times the class member is the first choice of classmates in choice area # 1 (Class Project nomination),(3) Number of times the class member is the second choice of class mates in choice area #1, (scores 5 through 13) repeating as above similarly for being identified as third choice in area # 1, (Party and choice area # 3 (Team) and choice area #4 (Best Friends).

Reliability/Validity. Niether the reliability nor validity of "Who Do You Like" questionnaire has been formally appraised. However, evidence of reliability has been found. One prior use of the questionnaire in Contra Costa County revealed that mainstreamed special education students were chosen significantly less often than would be expected by chance. No apparent differences, at the fourth grade level, were found among either the four areas of nomination or the three choice positions. This suggests that either this fractionation of the measurement was unreliable or that no true score differences existed.

Administration. The sociometric form is given by a teacher to his or her class as a "routine" activity. The task should be introduced as something the teacher needs to help in setting up future class activities. Additionally, assurance should be givne that each child's nominations will be confidential and used only by the teacher and school system for helping teachers do a better job. Finally, each classroom teacher should be encouraged to use the sociometric results in organizing groups for a subsequent class activity.

References: Student, Teacher, and Prent Attitudes Related to Mainstreaming. Contra Costa County Superintendent of Schools Office: Contra Costa County Responsible Local Agency, October, 1975.

Your Name ____________________

WHO DO YOU LIKE?

We are interested in knowing who you like in your class. Write the names of the people you would like most to be with in each of the following kinds of activities. This should only take you a few minutes. Please do this on your own and do not look to see what others are writing.

1. If you were going to do a class project in groups of four, what other three persons in this class would you choose to be in your group?

   1. ____________________
   2. ____________________
   3. ____________________

2. If you were going to have a party and could invite three people in your class, which three people would you choose?

   1. ____________________
   2. ____________________
   3. ____________________

3. If you were going to choose a team to play a game and were to pick your team from others in this class, which three would you pick first?

   1. ____________________
   2. ____________________
   3. ____________________

4. Who are your three best friends in this class?

   1. ____________________
   2. ____________________
   3. ____________________

INSTRUCTIONS FOR GROUP LEARNING SURVEY

Teacher,

Write on the blackboard the names of the students in the class. If two children have the same first name, include the initial of the last name. Please read the following paragraphs to your students after you distribute each of the four following questions.

READ:

I'd like each of you to select students in the class for this activity. Use the names with last initials on the board. Do this on your own .

When you are finished, put your answer sheets in this folder.

SAMPLE TALLY FOR GROUP LEARNING SURVEY

Page 1 of 1

	Item 1			Item 2			Item 3			Item 4		
NAMES	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
John D.	|				||							
John S.		||		|||								
Candy												
Susie					𝍸 |							
Tom												
Tony			|||									

Total = 6

Teacher,

Above is an example of the attached tally sheet for the Group Learning Survey.

To complete, write the names of all the students completing the form in your class along the left column so that it appears as the example above. Total the column of names, and indicate the total at the bottom of the list.

Next, go through each of the student's answer sheets, checking (𝍸 | tally fashion) which name appears as the first choice under Item 1, second choice under Item 1, third choice under Item 1; first choice under Item 2,....up to third choice under Item 4.

Retain the completed tally sheet with student answer sheets.

Page_____of_____

	ITEM 1			ITEM 2			ITEM 3			ITEM 4		
NAMES	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd

TOTAL = 105

Page____of_____

NAMES	ITEM 1			ITEM 2			ITEM 3			ITEM 4		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd

TOTAL =

Page____of____

NAMES	ITEM 1			ITEM 2			ITEM 3			ITEM 4		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd

TOTAL. = 100

Page_____of_____

NAMES	ITEM 1			ITEM 2			ITEM 3			ITEM 4		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd

TOTAL =

1. If you were going to do a class project in groups of four, what other three persons in this class would you choose to be in your group?

   1. ______________________________

   2. ______________________________

   3. ______________________________

2. If you were going to have a party and could invite three people in your class, which three people would you choose?

1. ______________________________

2. ______________________________

3. ______________________________

3. If you were going to choose a team to play a game and were to pick your team from others in this class, which three would you pick first?

1. ____

2. ____

3. ____

4. Who are your three best friends in this class?

1. ______________________________

2. ______________________________

3. ______________________________

Appendix D

INDIVIDUAL EDUCATIONAL PLAN EVALUATION FORM

The Evaluation Form for Written Individual Educational Plans (IEP) is a set of descriptions developed for the purpose of appraising IEPs written by a new kind of special educational professional -- the Resource Specialist. Under Public Law 94-142, each person with exceptional needs for educational services is required to receive services in accord with an IEP written specifically for that individual. This approach to special education service has not been thoroughly studied, either locally or nationally. The Evaluation Form described in this appendix was developed specifically for the purpose of creating IEP measurements which could be used in local efficiency studies testing the ability of IEPs in special education programs.

Description. The Evaluation Form consists of three sections. The M.B.O. Quantity score is based on five tabulation items (#2, 4, 7, 12, and 13) applicable to discrete and concrete IEP components. The second or M.B.O. Quality score is based on six rating items (#3, 5, 8, 10, 14, and 17) which are judged on a scale of 1 (low quality) through 5 (high quality). The third or M.B.O. Consistency score (Item #6, 9, 11, 15, and 16) appraises the correspondence between related IEP components and is rated from 1 (poor relationship) through 5 (good relationship). A copy of the Evaluation Form and Definition of Item Criteria is given in Tables 1 and 2.

Scoring. The IEP requires a trained scoring team of evaluators. The original development of the IEP used a scoring team made up of four individuals with prior teaching experience. The team was familiarized with California's Master Plan for Special Education, form for writing IEPs, and the definitions used in IEP subscores. Subsequent to that training, practice scoring sessions were held until the trainer judged the team reliable.

Reliability/Validity. The IEP Evaluation Form is still in the process of development as a measurement instrument. As such, only preliminary analyses have been conducted regarding reliability. These are briefly summarized below.

A set of Contra Costa County IEPs were independently rated by four pairs of evaluators. Three types of IEP items (Case Summary & Needs Quality, Goals, Quality, and Objectives Quality) were compared and 10 of the 12 contrasts were not significant. The two significant comparisons suggested that one evaluator consistently rated the Case Summary items higher than the other evaluators. In a different appraisal, the three item type (quality, match, and frequency) scores for 5 I.E.P.s and all evaluators were compared. Significant rater differences were found for one plan on the quality items and for another plan on the match items. A replication of this study was conducted and no significant differences were obtained. Overall, 42 separate statistical tests were conducted to check evaluation reliability and only four of these indicated significant rater differences. The I.E.P. authors concluded that "this level of agreement suggests that the ratings are at least moderately reliable."

Administration. The procedures for administration are, for the most part, implicit in the discussion above. A scoring team is to be assembled and trained. This team subsequently appraises I.E.P.s provided them and reports their conclusions on the form presented in Table 1.

I.E.P.s are routinely constructed throughout the county by School Appraisal Teams and others charged with the responsibility for an individual's special education program. A copy of each I.E.P. is deposited with the Office of Management Services. This pool of I.E.P.s can then be interrogated in accord with demands for utilization.

Reference: L. Anderson, S. Barner, and H. Larson.
Individual Educational Plan Evaluation.
Contra Costa County Superintendent of Schools Office:
Office of Management Services, July, 1977.

TABLE 1. Contra Costa County IEP Evaluation Form

Plan Code____________________ Rater Code_______________ Date_______________

Item	Ratings
1. Incomplete Form - items missing	______
2. Needs #	______
3. Case Summary and Needs	______
4. Goals #	______
5. Goals quality	______
6. Goals match needs	______
7. Teaching approaches #	______
8. Teaching approaches - quality	______
9. Teaching approaches match needs	______
10. Structure of environment quality	______
11. Structure of environment matches needs	______
12. Materials #	______
13. Objectives #	______
14. Objectives - quality	______
15. Objectives match goals	______
16. Criterion matches objectives	______
17. Readability	______
18. Months between plan date	______

Definitions to IEP Items

1. Incomplete Form - Items missing:
   Identify items that are missing throughout the plan. Items include pupil and school information, parent signature, checks for approval of Instructional Plan, and being informed of rights to due process. If an item is missing on one page, but filled in on another page, do not count it as a missing item. Count the missing items and indicate the total on the evaluation form.

2. Needs #, Page 1, Item II: Count the number of identifiable needs. Include social,emotional, as well as educational needs. If needs are presented both generally and specifically, count the most specific needs and do not count the related general need(s). Count even needs which are stated indirectly. Count weaknesses as needs.

3. Case summary and needs, Page 1, Item II: Summary should appear complete, concise and comprehensible. The case summary should appear as background appropriate for the identified needs. Needs should include pupils strengths and weaknesses, learning style, and/or other relevant characteristics. Rate summary and needs from 1 to 5, with 5 = high quality for both, rate a maximum of 4 if needs are listed and there is an insufficient history, rate a maximum of 2 or 3 if either summary or needs is not included, and 1 = low quality for both. Placement is not to be counted as a need.

4. Goals #, page 2, Items I & II: Count the number of identifiable goals. If goals are presented both generally and specifically, count the most specific goals and do not count the related general goal(s).

5. Goals quality, page 2, items I & II: Goals should be clear statements of general areas of remedial needs. Rate from 1 - 5, with 5 = clear description of remedial area, rate 3 if goals are either general, e.g. "reading; math," or specific, e.g., "learn the long 'a' sound ", and 1 = unclear, exceedingly specific or general, or a non-need focused statement.

6. Goals match needs: There should be clear relationship between the goals (page 2, items I & II) and needs (page 1, item II). Rate proportionately from 1 to 5, with 5 = very close match between needs and goals, rate 4 if one need is not matched with a goal, and 1 = almost no relationship. It is not necessary for goals and needs to parallel exactly. However, a goal or set of goals should address apparently immediate identified need(s), or subject area(s).

7. Teaching approaches #, page 2, Item III: Identify approaches by counting what the teacher actually has to do. If materials are listed, do not count them as teaching approaches; instead, count them as "materials", #12.

8. Teaching approaches, quality, page 2, Item III: Approaches should be clear and concrete recommendations for instructional actions. Rate from 1 to 5, with 5 = very clear, specific and concrete and 1 = vague and/or abstract. If an approach is too general, such as "use the visual approach", rate it a 3. Only the quality of approaches is being rated here; not if the approaches match the needs. If materials are listed, do not count them as teaching approaches; instead, count them as materials, #12. Rate only the approaches that are listed; do not assume that others not listed are better.

9. Teaching approaches match needs: There should be a clear relationship between teaching approaches (page 2, Item III) and needs (page 1, Item II). Ideally, the approaches should stem directly from the needs and should address all appropriate need areas. Rate from 1 to 5, with 5 = very close match and all needs addressed and 1 almost no relationship and major needs not addressed. If there are only a few approaches and more seem to be called for, according to the needs, rate it a 3. Do not count approaches that are identified but needs are not included on page 1.

10. Structure of environment - quality, Page 2, Item IV: Recommendations should be clear, concrete suggestions for arranging physical and/or social aspects of the instructional setting, class, or school. Rate from 1 to 5, with 5 = very clear and concrete and 1 - vague and/or abstract. Do not rate if structure of environment is left appropriately blank per stated goal(s) and need(s) description. Rate only the quality of the suggestions for "structure of environmemt", not whether these suggestions match the needs or not. Placement is not to be considered a recommendation for structure of the environment.

11. Structure of environment matches needs: There should be a clear relationship between the structure of the environment (page 2, item IV) and needs (page 1, item II). Ideally the structure of environment should stem directly from the needs and should address all apparently appropriate need areas. Rate from 1 to 5, with 5 = very close match and all need areas met, and 1 = almost no relationship, and major need areas not addressed. Do not rate if structure of environment is addressed, but needs are not included on page 1. If there are no or few suggestions for structure of environment, and the needs seem to call for more, rate this item down accordingly, e.g. a 3 if there could be one more suggestion.

12. Materials # - page 2, Item V: Count the number of identifiable suggested materials.

13. Objectives #, page 3, column 2: Count the number of identifiable objectives indicated in the plan.

14. Objectives - quality, page 3, columns 2 and 3: The quality of objectives/achievement criterion for the entire plan will be judged by reading each objective/criteria set and then rating all of them by a single number ranging from 1 to 5.

    The guidelines for evaluating each objective/criteria set is as follows:

Definitions of IEP Items (Continued)

1) The objectives must be behavioral. This can be determined by identifying that the child will have to perform or do a described action or activity. Behavioral does not refer to the child "knowing" or "learning." If the objective is not behavioral, it may receive only 1 or 2 points.

2) The objective/criteria set must include a condition under which the performance will occur. If the "condition" is included, one additional point may be added. If the "condition" is not included, a point is not added. The condition may be implied, e.g. "Will multiply" understanding that the condition is "when asked to".

3) The objective/criteria set must include a form of evaluation criteria to gain one additional point.

4) The objective/criteria set must include the level at which the performance must occur to gain one additional point. (e.g. 90% of 100 questions; important to include total number of questions when percentage is used as level of performance.

5) The objective/criteria set must include the extent or frequency the evaluation criteria will be used to gain one additional point.

With curriculum materials the extent or frequency of evaluation may be implied or included in the material itself. For example, many materials have built-in evaluation which include adequate extent of evaluation. (Standardized achievement or diagnostic tests, such as WRAT, are also considered to have an adequate extent of evaluation.)

After reading all objective/criteria sets, choose a typical example from those written and rate it according to the above guidelines.

15. Objectives match goals: There should be a clear relationship between objectives (page 3, column 2) and goals (page 2, items I & II). Rate proportionately from 1 to 5 with 5 = very close match between goals and objectives, rate 3 if one-half the goals are addressed by objectives, and 1 = almost no relationship. There should exist at least one objective for each identified goal. Do not rate if objectives are addressed, but goals are not included on page 2.

16. Criterion matches objectives: There should be a reasonable relationship between criterion (page 3, column 3) and objectives (page 3, column 2). When written as a whole, the objective/criteria set or unit should be broken down to the criteria and objective in order to ascertain whether the two, in fact match or relate. There should be an adequate match, which will be rated from 1 to 5, with 5 = very close match and 1 - almost no relationship. Rate proportionally the criteria and the objectives, e.g. if 3 of the 5 objectives have criteria, judge quality of the match of the 3.

17. Readability: Rate from 1 to 5 with 5 = very clear, easily understood simple statements in lay terms,no or very little jargon, and 1 = unclear or difficult to understand, complex style or excessive use of jargon. Plans should be comprehensible to the lay person with a minimum of interpretation. Simple language should be used when possible and jargon should be minimized.

18. Months between plan date: Figure in months the time between plan formulation and expected date of achievement for each objective. Subtract date (page 3, heading) from each expected date (page 3, column 4). Sum these scores (one per objective) and divide by the number of objectives. This figure will then be the average months needed to achieve the objectives identified on each plan.

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Appendix E

ATTITUDES TOWARDS MAINSTREAMING

A special form, the "mainstreaming" opinionnaire was created for this project. The intent was to develop a measurement of attitudes toward mainstreaming.

Description. The survey form (attached) consists of a brief description of exceptional children, special education, and mainstreaming. The latter concept is described neutrally and respondent opinions are solicited by the presentation of 10 statements related to mainstreaming. Each statement is presented with a standard set of Likert options allowing the respondent to express agreement or disagreement with each statement. A positive attitude is reported as agreement with half of the statements and disagreement with the others.

Scoring. Respondents are credited with scores from 1 (strong disagreement) thru 5 (strong agreement) for each item. Total scores may then range from 10 thru 50 with the former (low scores) reporting a strong positive attitude toward integration or mainstreaming in education. High scores would represent a positive attitude toward segregating IWENs in education.

Reliability/Validity. The source of the 10 statemetns was a factor analytic study conducted to appraise public attitudes toward mental retardation. The ten items used here emerged, in that study, as a separate factor which the authors (Gottlieb & Corman, 1975) labeled "Segregation in the Classroom". Factor loading ranging from -.35 to -.73 and from .50

to .77 were reported for these ten items.

All items were revised for use in the "mainstreaming" opinionnaire - each revision only replaced the term "mentally retarded" with the term "exceptional".

Administration. The "mainstreaming" opinionnaire may be administered individually or in groups, under supervised or unsupervised conditions.

Reference: J. Gottlieb and L. Corman, Public attitudes toward mentally retarded children. American Journal of Mental Deficiency, 1975, 80, 72-80.

"MAINSTREAMING" OPINIONNAIRE

Special Education exists for the purpose of better meeting the needs of exceptional students - a learning disability is an example of an exceptionality. One thing seems clear - exceptional children do much better when special educational provisions are made for them. Not as clear, however, are many issues related to the delivery and types of special education programs.

We would appreciate your opinion, your best judgment, on an important question in special education: Which, in general, is best - educating the exceptional child in special classes? - or with special supplementary programs in regular classes?

Listed on the back side of this page are a number of statements related to the question above. Do you agree or disagree with each statement? There are no right or wrong answers; regardless of how you feel, you may be sure that many others will respond similarly. Simply write the answer most closely describing your perceptions.

Thank you,

Richard F. Keefe,
Associate Superintendent,
Special Education and Services

Sandie Barner

by Sandie Barner,
Project Specialist

Strongly Disagree)
Disagree)
Neither Agree nor Disagree)
Agree)
Strongly Agree)
↓ ↓ ↓ ↓ ↓

In general, what are your feelings on the statements listed below? Circle the abbreviation best representing your feelings about each statement.

SD D N A SA (1) The special class is the best way of educating the exceptional child.

SD D N A SA (2) Exceptional children would learn more if they were integrated into regular classes.

SD D N A SA (3) The other children also benefit when exceptional children are integrated into regular classes.

SD D N A SA (4) The exceptional child will feel inadequate in the regular classroom.

SD D N A SA (5) The presence of an exceptional child in a regular class impedes the educational progress of other children in that class.

SD D N A SA (6) Integration of the exceptional child into regular classes will improve the child's acceptance by other children.

SD D N A SA (7) Integrating exceptional children into regular classes would probably contribute to negative behavior by other children in that class.

SD D N A SA (8) Exceptional children are more likely to be discipline problems in regular classes than in special classes.

SD D N A SA (9) The transfer of exceptional children to regular classes creates no major problems other than the needs for resource specialists.

SD D N A SA (10) Labeling the "exceptional" child helps to develop isolation from other children.

Appendix F

SENS (SPECIAL EDUCATION NEEDS SURVEY)

SENS is a questionnaire designed to assess the perceived importance of basic instructional programs and procedures used in defining California's Special Education Master Plan.

Description. SENS consists of 25 descriptions of educational objectives and procedures which are rated in regard to their importance in special education. Each description is rated twice each time on a seven point scale with "1" representing low importance and "7" representing high importance. One rating is made in reference to the importance currently assigned (labeled "IS"). The other rating is made in reference to level of importance as seen by the rater (labeled "SHOULD BE").

Scoring. The questionnaire provides a basis for appraising perceived need for the designated special education concepts. An average importance item score is obtained for a group and may be used in cross sectional or longitudinal designs to assess either group differences or detect changes over time for a single group. Although items similar to these have been used as a measurement of attitude, they have not been subjected to formal scaling analysis.

Reliability/Validity. The original (Spring, 1974) administration of SENS was to 613 individuals representing eight Contra Costa County groups differing in training and concern for special education. An analysis of variance of the scores from this administration revealed significant differences among the groups, the topics and questions, and between the IS and SHOULD BE importance modes. The mean importance scores obtained in the 1974 "norming" study are given in Table 1.

SENS does not measure established psychological states or traits per se. The validity of SENS is what is termed "face validity" - that which is measured is that stated/implied in the item descriptions. The information produced by SENS has utility wherever the perceptions of designated groups are pertinent to decision making in special education.

Administration. The survey is self-administered and may be distributed and returned by mail, given a proper cover letter and instructions. It is estimated that most respondents can complete the survey in about 20 minutes. A complete copy of the questionnaire and cover sheet is attached.

Reference. A study of Perceived Needs for Special Education Master Plan Concepts in Contra Costa County. Contra Costa County Superintendent of Schools Office: Office of Special Education Planning, 1974.

TABLE 1. SPECIAL EDUCATION NEEDS SURVEY (SENS): mean Importance Scores by Group, Question, and Importance

Topic	Question No.	Importance	Working Comm.	Admin.	Spec. Ed. Teachers	Parents	School Psychologists	Elementary Teachers	Secondary Teachers	Ancillary Personnel
Comm Involve	1	Is	3.1	3.9	3.4	3.5	4.0	3.2	3.2	3.5
		Sh Do	5.8	5.3	5.6	5.4	5.4	5.3	5.3	5.0
Due Process	2	Is	3.6	4.7	4.3	4.2	5.2	4.4	4.1	4.9
		Sh Do	6.1	5.7	5.8	5.9	6.6	5.3	5.2	5.5
Class System	3	Is	3.9	4.0	3.5	4.1	3.8	3.7	3.6	4.1
		Sh Do	5.0	4.7	4.6	4.3	4.6	4.7	4.2	4.0
Ident, Assess & Planning	4	Is	5.0	5.3	4.9	4.7	5.8	4.5	4.6	5.1
		Sh Do	6.7	6.5	6.8	6.6	6.9	6.7	6.4	6.7
	5	Is	4.2	4.0	[illegible].6	4.3	5.0	4.2	3.3	4.7
		Sh Do	6.3	6.2	6.4	6.2	6.9	6.3	5.8	6.5
Management & Support	6	Is	4.4	4.8	4.3	4.7	5.4	4.2	4.2	4.7
		Sh Do	6.7	6.6	6.9	6.6	6.9	6.7	6.5	6.7
	7	Is	4.2	4.3	4.0	4.3	5.2	4.1	3.6	4.5
		Sh Do	6.2	6.0	6.1	6.0	6.4	6.1	5.0	5.9
Transportation	8	Is	5.4	4.9	4.8	4.9	5.9	4.6	4.0	5.3
		Sh Do	5.8	5.3	5.2	5.5	5.7	5.0	5.1	5.2
Capital Outlay	9	Is	4.2	3.9	3.8	4.0	5.2	3.7	2.9	3.8
		Sh Do	5.7	5.5	5.2	4.9	5.7	5.3	5.2	5.7
Spec Classes	10	Is	4.2	4.6	4.3	4.3	4.9	4.3	3.8	4.5
		Sh Do	6.2	6.0	6.0	5.7	6.8	5.7	5.4	6.3
Resource Specialist	11	Is	4.4	4.6	4.8	4.6	5.4	4.6	3.9	4.4
		Sh Do	6.5	6.1	6.2	6.3	6.7	6.0	5.8	6.1
	12	Is	4.0	4.4	4.1	4.2	4.4	3.8	3.5	4.0
		Sh Do	6.4	6.4	6.6	6.3	6.6	6.2	6.0	6.6
	13	Is	3.2	3.7	3.1	3.5	4.7	3.2	2.4	3.1
		Sh Do	6.5	6.1	6.4	6.4	6.8	6.3	6.3	6.1
	14	Is	3.6	4.1	3.8	4.2	4.6	3.5	3.2	3.8
		Sh Do	6.3	6.0	6.1	6.0	6.7	6.0	5.7	5.8
	15	Is	3.4	3.9	3.5	4.1	4.1	3.3	3.2	3.6
		Sh Do	6.8	6.3	6.4	6.4	6.8	6.2	6.2	6.2
Desig.Services	16	Is	4.3	4.4	3.7	4.1	4.7	3.9	3.7	4.5
		Sh Do	6.5	6.0	6.4	6.2	6.6	5.9	6.1	6.5
Non public Schls	17	Is	3.3	2.9	2.0	2.7	3.3	1.9	2.9	2.7
		Sh Do	5.6	5.1	4.8	4.7	4.8	4.2	4.9	5.2
State Resid Schls	18	Is	5.1	4.3	3.7	3.9	5.6	3.5	3.9	4.2
		Sh Do	6	6.0	5.7	5.7	6.0	5.6	6.3	5.9
Eval & Info Systems	19	Is	3.7	4.0	4.1	3.9	4.0	3.7	3.2	4.1
		Sh Do	6.0	6.2	5.9	6.0	6.3	5.8	5.0	5.7
	20	Is	4.2	4.0	3.8	4.1	4.1	4.0	3.5	4.6
		Sh Do	4.8	4.7	4.8	4.6	4.6	4.6	4.6	4.7
Finance	21	Is	4.1	4.5	4.1	4.3	5.4	3.8	3.7	4.1
		Sh Do	6.5	6.3	6.3	6.2	6.2	6.1	6.1	6.3
Personnel	22	Is	3.4	3.6	3.0	4.0	3.0	2.9	2.9	2.9
		Sh Do	6.0	5.7	5.5	6.0	5.8	5.2	5.7	5.1
Educ & Environ	23	Is	2.7	3.0	2.4	3.1	2.6	2.5	2.4	2.3
		Sh Do	5.7	5.7	5.9	5.4	5.2	3.9	3.9	5.6
	24	Is	2.6	2.9	2.3	2.6	2.4	2.4	2.5	2.4
		Sh Do	5.3	5.0	5.6	4.7	5.0	5.2	5.0	4.9
	25	Is	2.3	2.6	2.1	2.6	2.9	2.2	2.3	2.2
		Sh Do	5.3	5.2	5.7	5.[illegible]	5.4	5.3	4.8	5.1

OFFICE OF MANAGEMENT SERVICES

Contra Costa County Superintendent of Schools
75 Santa Barbara Road
Pleasant Hill, CA 94523

SPECIAL EDUCATION NEEDS SURVEY

The Office of Management Services is currently involved in implementing the new State Master Plan for Special Education in Contra Costa County. We would like a few minutes of your time to assist us in identifying needs for special education services.

This survey is being distributed for the purpose of determining the views of those who can contribute to the development of better programs in special education. The focus of this survey is on a number of educational activities and programs related to special education. Special education provides for the needs of exceptional children; this includes those who are Gifted, Mentally Retarded, Educationally Handicapped and Physically Handicapped. While there are a number of different kinds of exceptionalities, all exceptional children have one thing in common. They can do much better when special educational provisions are made for them.

Please read each question carefully, then indicate two responses to each. The first response you are asked to make is one which reports your best judgment as to how important this educational activity IS NOW in school programs for exceptional children. The second response should be your best judgment as to how important this same activity SHOULD BE in school programs for exceptional children. If you have no information or opinion in regard to a question, leave it unmarked. Indicate your response to each question by circling the number which best reflects your opinion.

Retain the completed survey form.

Thank you,

Dr. H. Larson, Director
Office of Management Services
Contra Costa County Superintendent of Schools Office
75 Santa Barbara Road
Pleasant Hill, CA 94523

Do You have Mainstreamed Special Education Student(s) in Your Class at this time (e.g. students receiving assistance from a Resource Specialist, Language and Speech Therapist, Individual or Small Group Instructor...)?

Yes________ No ________

Please mark two responses to each item: First, mark your judment regarding "What IS the current importance of this special education objective?" Second, mark your judgment "What SHOULD BE the importance of this special education objective?"

Special Education Objectives		Low Importance			Average Importance		High Importance	
1. To provide an opportunity for parents, educators, exceptional children and others to participate with educators in decision making.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
2. To provide parents an opportunity for a fair and unbiased appeal regarding disagreements about individual placements in Special Education Programs.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
3. To establish a classification system to meet State reporting and data collecting requirements.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
4. To diagnose the problems of exceptional children as precisely as possible.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
5. To develop detailed educational plans for each child identified as exceptional.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
6. To make as early an identification as possible of those children who will require a program of Special Education.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7

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CONTINUED

Special Education Objectives		Low Importance			Average Importance		High Importance	
7. To provide such indirect educational support services as tutoring assistance and special equipment to exceptional children.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
8. To transport exceptional children to and from school.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
9. To provide special buildings and facilities specifically designed to meet the needs of children in Special Education Programs.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
10. To maximize the involvement of children with exceptional needs in the educational programs of the regular classroom.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
11. To meet the needs of some exceptional children through special part-time or supplementary programs while keeping such children enrolled in regular classes.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
12. To make individual instruction available to each exceptional child who needs it.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
13. To provide special professional assistance to the teachers of regular classes so that they can better meet the needs of exceptional children in their classrooms.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7

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Special Education Objectives		Low Importance			Average Importance		High Importance	
14. To provide close coordination between special education programs and regular school programs.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
15. To provide a resource program where the exceptional children enrolled in regular classes can secure the extra assistance needed for them to succeed in school.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
16. To provide special services such as speech training, physical therapy and mobility instruction for appropriate exceptional children in regular classes.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
17. To provide financial support to families whose need for special education can best be met in a private school which charges tuition.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
18. To provide State residential schools for the full-time care and education of children with severe problems such as total blindness, deafness and other serious problems.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
19. To regularly provide evidence that the Special Education Program is accomplishing its goals.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7

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Special Education Objectives		Low Importance			Average Importance		High Importance	
20. To provide information regarding exceptional children and Special Education Programs to the State.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
21. To finance Special Education Programs through additional State support.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
22. To require teacher participation in in-service training programs provided by the district or the county office of education.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
23. To provide special classes in child growth and development for the parents of exceptional children.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
24. To provide educational programs to the community at large regarding the needs of exceptional individuals.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7
25. To provide educational programs for children in regular classes about the needs of exceptional individuals.	IS	1	2	3	4	5	6	7
	SHOULD BE	1	2	3	4	5	6	7